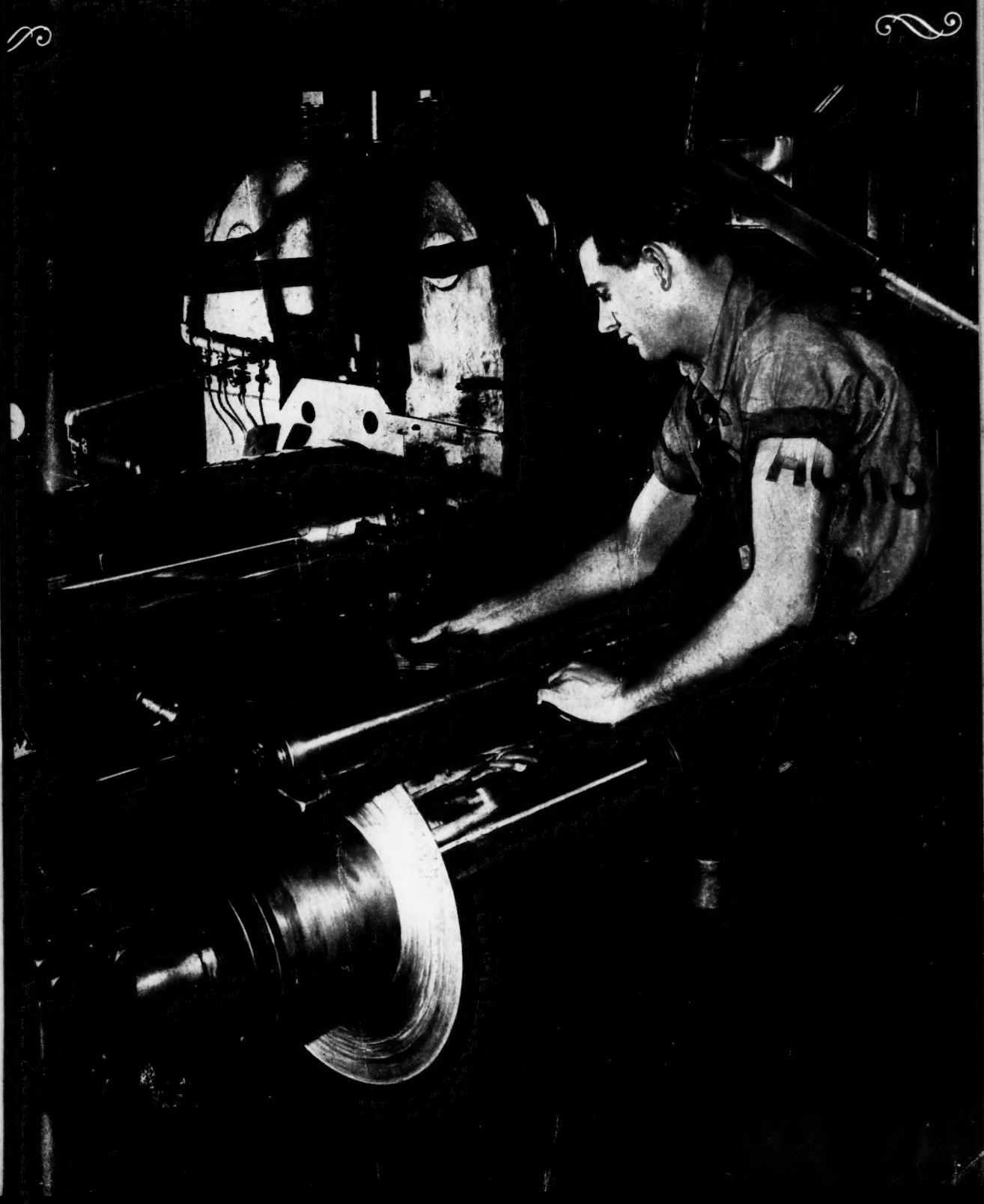
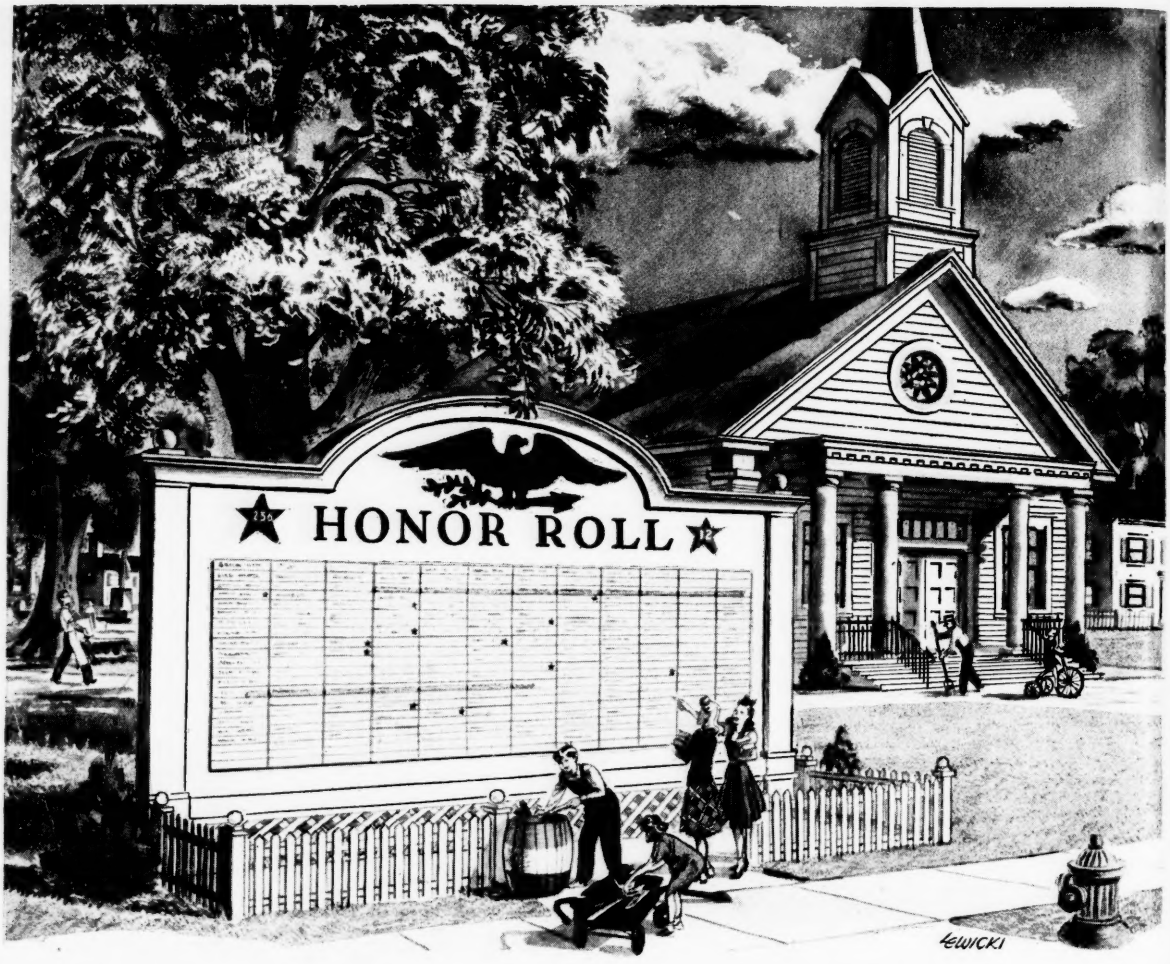
MANUFACTURERS Record



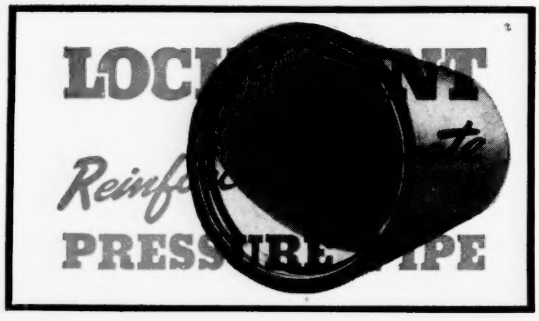


FROM THE HONOR ROLL...TO THE PAY ROLL

NOW THAT THE VICTORY whistles have blown and our boys are coming home, it's up to every city and town to transfer each man's name from the Honor Roll to the Pay Roll. One way your community can accomplish this is to plan Public Works Programs NOW . . . which will give your own men plenty of jobs right in your own home town.

On water supply, sewerage and drainage projects the Lock Joint Pipe Company is prepared to come into your town, set up local temporary plants and employ up to 90% local labor. Your merchants will also benefit through the local purchase of a large quantity of supplies and materials. As a result, a substantial part of the cost of the project will be redistributed in your own community.

The use of Reinforced Concrete Pipe will not only give immediate employment to some of your engineers, mechanics, laborers, and other skilled workers . . . BUT it will bring absolute assurance that your pipeline problems of corrosion, tuberculation and maintenance are completely and permanently solved.



Whether your project is large or small, for the present or the future, your 'phone call, telegram, cable or letter to any of our offices will bring a prompt reply.

LOCK JOINT PIPE COMPANY

Established 1905

P. O. BOX 269, EAST ORANGE, N. J.

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Joplin, Mo. • Valley Park, Mo. • Cleveland, Ohio • Hartford, Conn. • Navarre, Ohio

SCOPE OF SERVICES *Lock Joint Pipe Company specializes in the manufacture and installation of Reinforced Concrete Pressure Pipe for Water Supply and Distribution Mains in a wide range of diameters as well as Concrete Pipe of all types for Sanitary Sewers, Storm Drains, Culverts and Subaqueous lines.*

MANUFACTURERS RECORD

ESTABLISHED 1882

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EDITORIALS

ARTICLES

DEPARTMENTS

Cover Illustration—Aluminum foil rolling at the Cochran Foil Company, Louisville, Ky.

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"SM" is a new, different electrode for welding light gauge steels. It's for production welding — so fast, so easy to use, you can virtually "brush on" weld metal. "SM" comes to give arc welding new ability in the *volume* fabrication of light gauge mild steels.

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P&H MODEL WA-200 ARC WELDER. *Just one control for any* desired welding heat. Arc response is automatic. WSR (Welding Service Range) tells you the exact amount of *usable* welding current. "Visi-matic" calibration enables you to select instantly the correct current for each class of electrodes. Write for information.

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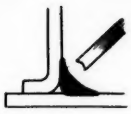
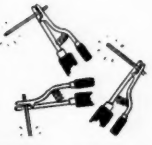
AC OR DC — Yes, whatever your machines, AC or DC, whatever your work, "SM" performs perfectly. It's the true production electrode for welding thin gauge metals.



LOWER PENETRATION — You get less penetration—the *desired* amount of penetration with "SM." Gone are your troubles of "burn-throughs" and "suck-ins." Use "SM" on metals down to 20 gauge.

"DROP OFF" SLAG — A really unusual and important feature of "SM" — main reason why one of America's largest light gauge fabricators uses it exclusively. Slag removal is no problem with its "drop off" characteristic.

"SM" gives you—



ALL-POSITION — Whatever you're fabricating — auto or truck bodies, tanks, furniture, window frames, etc., you can weld them in any position. All-position welding rounds out "SM's" versatility — makes it an electrode you can't afford *not* to use.

CONVINCE YOURSELF—TRY "SM"

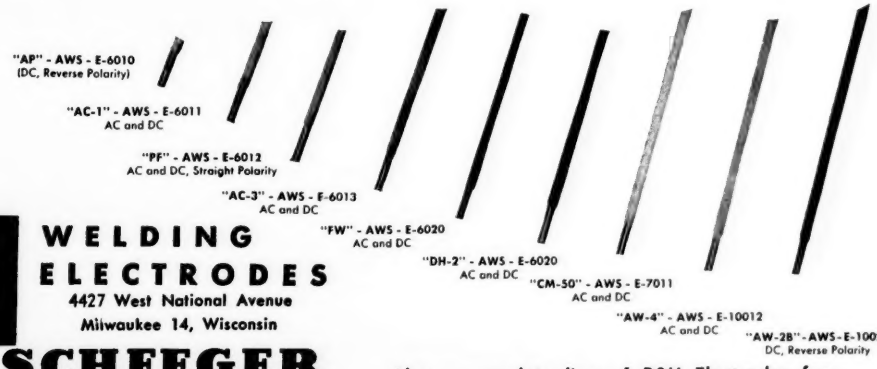
SPRAY TYPE ARC—Specially developed coating gives "SM" *ideal* concentrated spraying action for faster, smoother, stronger welds on all positions.

OTHER POPULAR P&H MILD STEEL ELECTRODES

There's a production approved electrode for every requirement in the complete P&H line. Below are just a few. Get complete information from your P&H representative or write us.

REDUCED SPATTER LOSS—The extremely small amount of spatter greatly increases welding efficiencies of "SM."

FLAT, THIN BEAD — Another important advantage: Its very smooth, flat bead. Say goodbye to "humped" or convex bead that requires expensive grinding, careful finishing.



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AMERICA'S MOST COMPLETE ARC WELDING SERVICE.

DC Welders | AC Welders | Welding Electrodes | Welding Positioners | Welding Production Control Systems | Electric Hoists | Electric Cranes

Little Grains of Sand

"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."

The solution to the present acute housing shortage is more production, not more legislation. Houses are built by people working with materials made by people. They are not built by politicians and the materials for them are not to be found in the transformation of theories into laws.

The argument of those who urge that government controls over private industry be maintained and extended is based on the assumption that the country is in an "emergency." It was demonstrated during the so-called recovery period under Mr. Roosevelt, that an emergency could be cooked up to justify any desired bureaucratic course. The pattern was set then. And it had gone a long way toward completion when the war came along to give it a boost. The naive notion entertained by so many people that these are war controls we are dealing with now, that this is a governmental policy of expediency born of the necessity of waging war, is perhaps the most serious obstacle to a clear understanding of what is going on. This whole concept of governmental control had been imbedded in the Washington set-up well before there was any war.

We are indebted to the house organ *No Protest!* published by the State-Planters Bank and Trust Company of Richmond, Virginia for the following poem by an unknown writer:

Consider the cow with her poise and urbanity
Doing her share of the work for humanity.
Her bed and her board and her background of scenery
Supplied by adjacent and succulent greenery.
The cow may regard with the utmost passivity
Methods and plans to control productivity.

Her function is one of complete spontaneity
Ruled by a kind and beneficent deity.
Having no duties beyond her ability
Hers is a world of utmost stability.
Cared for by others from youth to maturity,
A perfect example of Social Security.

Speaking on the "We Owe It To Ourselves" theory in the House on December 12, Rep. Daniel A. Reed (N. Y.) said among other things (*Congressional Record*, p. 12109):

"I wonder, and I think some other Members of this body must wonder, why, if Lord Keynes could see that deficit spending was such a fine thing for the United States of America, why he does not now propose deficit spending for the Socialists to carry out their program in England, instead of wanting us to give them the money. He was very certain deficit spending was just the thing for the United States to practice. His

(*Continued on page* 14)

(*Continued from page* 10)

criticism, as we have seen from the words I have quoted, is that we had neither the courage nor the foresight to spend enough. We should have spent more than we did spend. We should have come into the war with a bigger debt than we did have. But what a singular thing it is that Lord Keynes, this brilliant British economist, now finds that deficit spending is not a good thing for his own country. He must come to the United States of America and demand—not ask, mark you—not even politely request—but demand, that we give them $4,500,000,000 or $5,000,000,000 so the Socialists can socialize industry in England without having to plunge into deficit spending."

There were those who after the First World War were ready to write the obituary of rail transportation under private enterprise in this country. The railroads had broken down under the stress of war demands and under government operation suffered losses in 1918 which totaled more than $1,500,000,000, which was borne by the taxpayers.

In contrast, in World War II the railroads under private management not only met unprecedented demands for their services but paid more than $4,000,000,000 in federal taxes. They have built up their financial reserves for new equipment, have paid off a substantial share of past obligations, and are today probably better prepared for the future than at any time in their history.

It cannot be repeated too often that the principal indictment against the administration at Washington during the past twelve years has been its lack of common honesty. The Social Security law, for example, was touted as a great humanitarian measure when the truth of the matter was that it was just another tax. The revenue collected under this law goes into the general fund and is spent just like any other money collected by the government.

Anyone watching an orchestra, sees management and production being carried on right before his eyes. An orchestra may have over 100 musicians. Each individual may be a skilled artist with his particular instrument, but in the orchestra, the musician does not play as an individual but as a member of a particular section of the orchestra and as a member of the entire orchestra. To produce orchestral music, each musician and each section of instruments must do the right thing at the right time. They can't do that without management—in the person of the conductor. The conductor is doing a management job and the orchestra a production job from the first note to the last.—Ernest T. Weir.

Here we are with all of the essential elements of the greatest era of prosperity in the history of the Nation at our finger tips. There are 130,000,000 hun-

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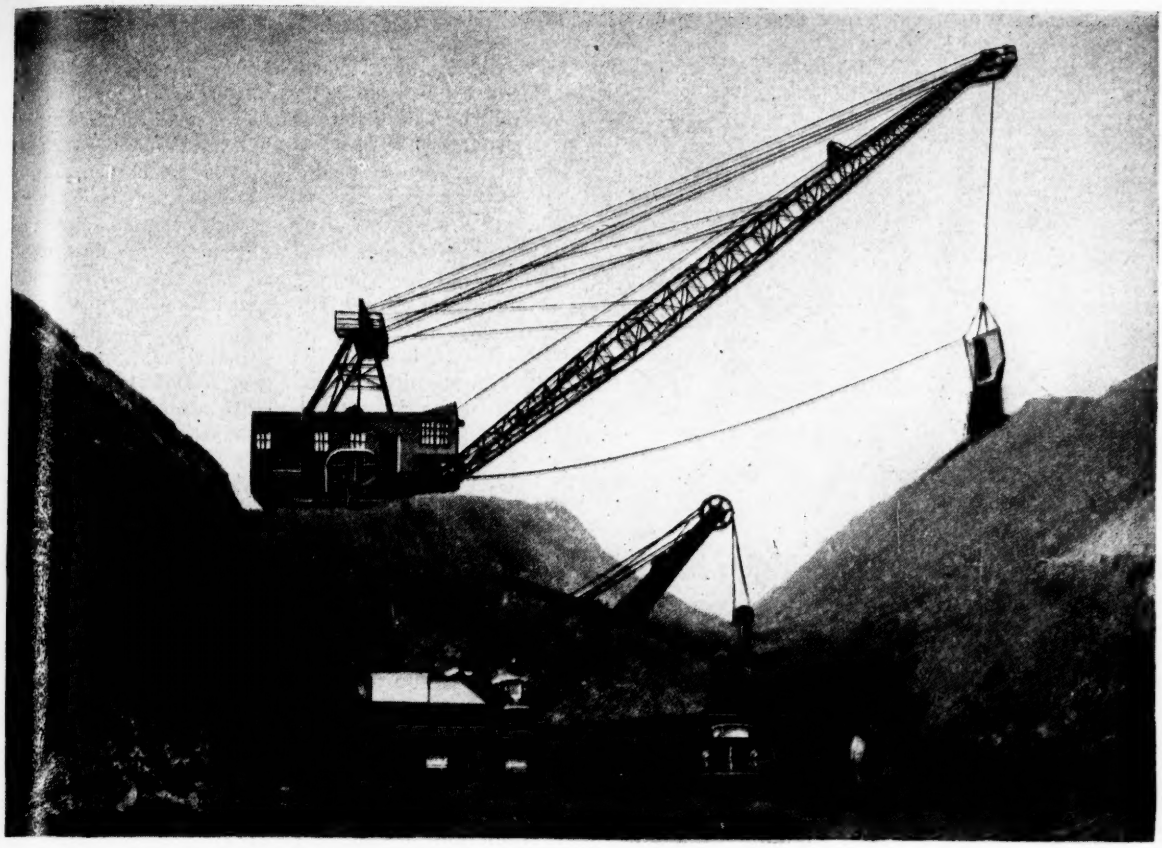

One Of Wire Rope's Toughest Jobs!

THIS huge earth mover, known as a walking dragline, operating in a coal strip-mine, scoops up 6 tons of earth at every swing, each 50 to 60 seconds, day in and day out. Its efficiency---in fact, its ability to perform continuously month after month, year upon year---depends largely on a few strands of wire rope. ***This is one of the toughest jobs which wire rope is called upon to perform.***

Through these cables is transmitted all the power of a 400 horsepower Diesel engine, to swing a 160 foot steel boom and a truck size drag bucket. The wire from which this cable is made must be tough and strong---must resist abrasion---must be uniform in gauge and possess flexibility and other positive characteristics. These are the salient reasons why these cables are made from Youngstown's Yolectro High Carbon Rope Wire.

Like all its wire mill products, the wire supplied by Youngstown to wire rope manufacturers is of finest quality steel, refined, rolled and drawn to exact specifications. Youngstown wire can be furnished now to your specifications. Write, wire or phone our nearest branch.

THE YOUNGSTOWN SHEET AND TUBE COMPANY
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Manufacturers of
CARBON - ALLOY AND YOLOY STEELS

YOUNGSTOWN

Wire - Nails - Bars - Rods - Sheets - Plates - Conduit - Pipe and Tubular Products - Electrolytic Tin Plate - Coke Tin Plate-Tie Plates and Spikes.

(*Continued from page* 14)

gry people in the United States—hungry for automobiles, for refrigerators, for radios, for dwellings, for clothing; hungry, in short, for nearly everything that people need and want. We are possessed of the largest, best conditioned, best tooled industrial plant ever assembled at one time in any Country on Earth. We have a wealth of all the raw materials necessary to the production of these things we want. Yet business stagnates, strikes spread over the Nation and the vast machine that functioned so splendidly during the war grinds to a halt.

Why? Simply because the Government insists on trying to run the economic show, on projecting into peacetime the fiction that we still are at war, in applying the shackles of collectivism to a free enterprise system.—*Wheeling (W. Va.) Intelligencer.*

A law providing for permanent license plates for passenger cars was passed recently in Wisconsin, with expirations spread over the entire year by months. Effective January 1, 1946, the law establishes 12 registration periods. These are designed to eliminate the annual renewal rush.

Estimated annual savings in administration expense are put at $250,000.

A great deal of attention is now being given to the sweet potato, as a crop which may supplement cotton and which, eventually, may equal cotton in importance. The research work which has been done on the sweet potato is bound to be of the greatest value to many large land owners who are faced with the necessity of taking land out of cotton and putting it into some other crop. In Florida a $7,000,000 factory is being completed which will manufacture starch. In Mississippi sweet potatoes are being grown which are 30 per cent starch. In Louisiana five recently built dehydrating plants will ship this season under lend-lease contracts 25 million pounds of dehydrated potatoes. In 1944 the 16 southern states produced 66,370,000 bushels of sweet potatoes, 92 percent of the crop produced in the nation as a whole.

Along with purchasing power, productivity is needed to assure prosperity. An adequate supply of desired commodities is equally as important as the power to buy them. One without the other is worthless.

The history of civilized progress is the story of new and more commodities and increasing power to buy them. An often overlooked element of this history is the effect balance between the two essentials has had in the rate and quality of progress. When the scales have dipped too far in favor of either productivity or power to buy, there have been dislocations and setbacks. Some politically inclined economists give the impression of having forgotten this fact. They emphasize purchasing power; disregard productivity.

RE-EMPLOYMENT AREA!

Business Opportunities for Veterans in the Territory Served by Kansas City Southern Lines

This great Midwestern-Southwestern area is comparatively new country, with plenty of living room. Here are the basic needs of all industry . . . a treasure trove of minerals and metals that challenges new manufacturing ideas . . . opportunities to mold a future to your liking!

There is money here in agriculture, horticulture, livestock and dairying. In the Ozark and Ouachita mountain regions, prosperity and contentment await those willing to work and plan. There are ready markets for the fine fruits, berries, melons, grapes and vegetables that grow so readily here. In the Ozarks, poultry production is greater than in any other part of the country, while large condenseries need milk and more milk from the dairy herds.

—Grain Farming
—Truck Farming
—Dairy Farming
—Poultry Raising
—Fruits and Berries
—Livestock
—Cotton
—Sugar Cane
—Lumbering
—Pulpwood
—Mining
—Commercial Fishing
—Light Manufacturing

Kansas City Southern Lines have no land to sell, but if you want to get a start in this progressive corner of America, our Industrial Department will be happy to give you any information you need, or refer you to the proper source.

Address Development Department, Kansas City Southern Lines
Kansas City Southern Bldg., Kansas City 6, Mo.,
for Information and Cooperation.

KANSAS CITY SOUTHERN Lines

New Southern Office Significant

The Southern Railway, in extending its work for the South, will open a general industrial office at Charlotte.

There is considerable significance attached to this move which recognizes the importance of promoting new business for the railroad in not only Charlotte but the entire Piedmont area. It may be expected that the railroad will profit, and the entire section likewise.

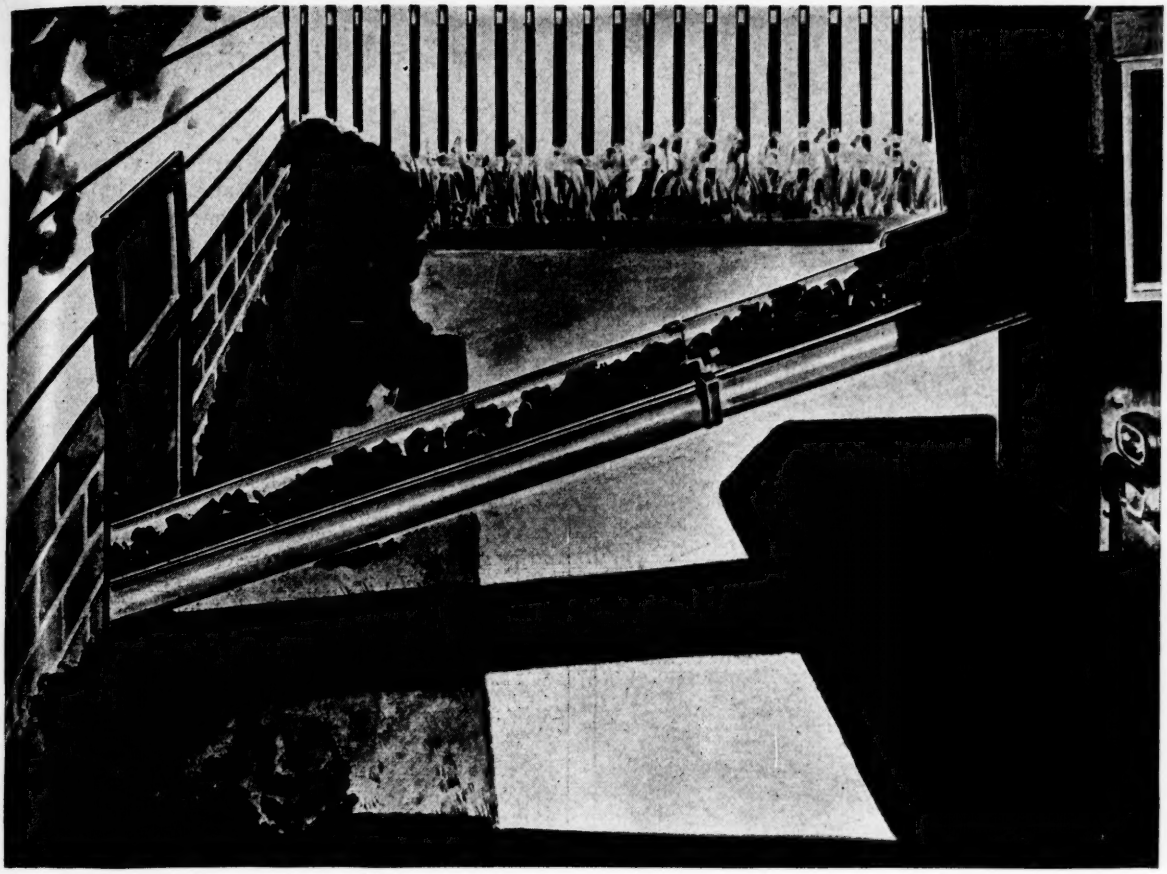
The Charlotte *Observer* says that "the establishment of this new office is refreshing and hope-inspiring." President Norris says, "the great industrial potentialities of the Carolinas influenced us to take this step. . . . In addition, recent national and world developments have multiplied the industrial development opportunities of both North Carolina and South Carolina, and the inherent resources of the two states will provide strong inducements for new industries to locate in the area."

This step is in keeping with the Southern Railway's industrial work. There was a time before World War I when the Industrial Department of the Southern, under the management of M. V. Richards, with 50 employees under him, set an example for railroads in industrial development work. The expansion of the textile industry in the Southern states was due in no small measure to the Southern's Industrial Department.

Far-reaching plans were laid by Mr. Richards and his assistants. Their scope covered the entire area through which the Southern operates from Washington to New Orleans. Important offices run by this Industrial Department were located in more than one city of the South, and their success is a record of accomplishment.

Unfortunately for the South, when the United States entered World War I, and William G. McAdoo was placed in charge of the railroads, with John Skelton Williams, Comptroller of the Currency at that time, as McAdoo's assistant in railroad management, industrial effort in large part was set aside for the exigencies of war. The industrial departments of the railroads of the country were not permitted to use funds from operating revenue for promotional work which included advertising and industrial advice. They could only take the money for this purpose from a grandmother's fund, or from investments or rents. This was a hard blow to the pioneers who were making history in their progressive efforts to develop increased freight receipts from new industrial enterpirses.

The South today—alive more than ever to its industrial potentialities—may expect to derive decided benefit from an intensified industrial effort on the part of the great trunk lines, as well as the smaller ones operating in the southern states; and too by the public utilities which are alert also to the possibilities of the progress that lies ahead of the territory south of the Mason & Dixon line.



Maybe You Don't Deliver Coal

Maybe you don't even *use* coal. But this story about a coal chute may pay you off in cash no matter *what* your business.

You see, there was a small concern in Reading, Pennsylvania, called the Palm Body Company, Inc. It was run by Henry Palm, his two sons, and six mechanics. It manufactured coal delivery equipment, including coal chutes.

Now, coal chutes have a way of wearing out—not just because of friction, but because sulphur in the coal eats the metal. However, it *doesn't* eat aluminum.

So, Mr. Palm talked with an Alcoa representative about making an aluminum coal chute. An experimental one was made. It was the first aluminum coal chute we know of and a good one, too—but not good enough to satisfy either Alcoa or Mr. Palm.

A second chute was built. This was *it*. Mr. Palm built and quickly sold seventy-five of them to dealers just around Reading—and got orders for more.

Then the war came, and aluminum was urgently needed elsewhere. With peace, however, the Palms went back to making aluminum chutes in a bigger way. Not exactly sure how to go about producing them in volume, they got more counsel from Alcoa. Soon they hope to be selling and shipping aluminum coal chutes far and wide.

* * * *

There are a lot of things aluminum can make better. And if you need any help in finding out how, Alcoa is able and eager to put at your disposal—as it has put at the disposal of thousands of businesses, large and small—the greatest fund of aluminum experience in the world. It does this without any cost or obligation whatsoever.

Dairies Swell South's Income
South Cashes in on Milk

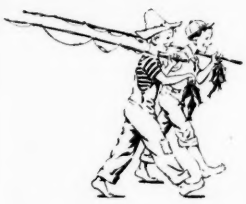
The dairy industry looms large on the economic frontiers of the South. Reconversion in this industry is actually continued conversion, with technological advancement bringing constant improvement and expansion.

The war enlivened and accelerated development. It brought urgent needs and these speeded technological progress. Despite manpower shortage, southern milk and butter production was pushed to an all-time high. The 1945 edition of the *Blue Book of Southern Progress* discloses that dairy products in 1944 brought Southern farmers an income of $573,931,000, contrasted with $263,138,000 in 1940. While a portion of this increase can be attributed to higher prices, this cannot be said of factory production of processed dairy goods which reveal more clearly the gains made by the South. In 1944, a total of 1,173,431,000 pounds of dairy products were processed, including creamery butter, cheese and evaporated, condensed and powdered milk. Ice cream production amounted to 125,318,000 gallons. Respective 1940 figures were 761,415,000 pounds and 65,878,000 gallons.

To accomplish these results Southern farmers speeded up improvement programs initiated before the war. They improved the productivity of herds through better breeding practices. They adopted artificial insemination, through which offspring have been produced that have yielded as much as thirty more pounds of butterfat per year than their dams. They planted more of their land to feeds and forage. They installed new machinery to speed production and conserve labor. For example, it is now possible for four men with a power mower, side-delivery rake and pick-up baler to harvest hay that formerly required a thirty-man crew.

Notwithstanding advancements already made, it is predicted by Secretary of Agriculture Anderson, himself a dairy farmer, that the dairy farmers of tomorrow will be able to produce more milk, with less labor, at a lower cost per unit. Furthermore, Secretary Anderson asserts that for a good diet the American people should consume several billion pounds of milk more than the record amount now being produced. He expects better nutrition for the nation and widening markets for dairy farmers.

The lag in production of cotton broad-woven fabrics is largely attributable to the steady decline of manpower in the cotton textile industry since early 1943, due to the draft and the attraction of higher wage munitions industries. The expectation that this trend would be reversed at the end of the war has not materialized. Although employment has been stabilized just below 410,000 in recent months compared to a peak of 510,000 in December, 1942, there are no signs of significant manpower gains by the textile mills. In addition, after V-J Day, most cotton mills abandoned the effort to maintain a 48-hour week.



NO STONE UNTURNED!

. . . *Remember* . . . when you were a kid . . . and the fish were biting in the creek down by the old mill? You wanted bait and you left "no stone unturned" to find it.

During World War II, the Norfolk and Western Railway left no stone unturned to move its full quota of fighting forces and materials of war. Now that the war is over, the railroad is leaving no stone unturned to justify your preference for the N. & W.'s Precision Transportation.

Many improvements are under way. We are working on the development of new-type coal burning locomotives, employing revolutionary principles of power. Freight and passenger equipment is being improved. Schedules are being speeded up. Centralized Traffic Control is being expanded to expedite the movement of traffic and increase safety. A new merchandise pier—one of the largest and most modern ever built—is being constructed at the N. & W.'s ocean terminal at the great port of Norfolk, Va.

All of these additions and betterments are under way. Even so, the Norfolk and Western is ready and equipped *today* to move your traffic, for the N. & W. has expended approximately $90,000,000 since the fall of 1939 for improvement and expansion of its facilities.

Seventy-five per cent of the railroad's freight and passenger traffic is moved by modern locomotives less than ten years old, or locomotives that have been completely modernized. Track is maintained at a high state of excellence—solid and strong. Terminals and yard facilities are modern and extensive. Manpower is efficient and experienced.

In short, there has been no let-up on the N. & W. since Victory . . . service will continue to be improved . . . and to this end, we will leave no stone unturned.

Norfolk and Western
RAILWAY
PRECISION TRANSPORTATION

Norfolk and Western trains connect the Midwest with the Virginia seacoast and the North and South. N. & W. representatives are located in most of the principal cities of the country. They are at your service. Call or write the nearest one to you.

Full Employment

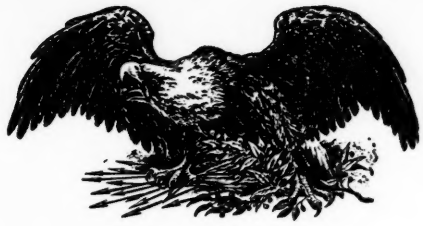
Karl Marx, away back when, offered a plan to bring about full employment. He has had his followers. Stalin, Mussolini, Hitler, all followed in the footsteps of Marx. Stalin says—in the Communist constitution for Russia—"Citizens of the U. S. S. R. have the right to work, the right to receive guaranteed work with payment for their work in accordance with its quantity and quality." Hitler told his followers, "We shall banish want; we shall banish fear. National socialism is the revolution of the common man." Mussolini said, "It is only when private enterprise is inadequate that the state intervenes." Do we want to follow in the footsteps of Italy, Germany, or Russia? Do we want to exchange our conditions, imperfect as they may be, for the conditions that are prevalent today in either Italy, Germany, or Russia—conditions brought about as a result of following false leaders?

Sir William Beveridge . . . is the man that sold our late President on the idea of 60,000,000 jobs, full employment for all. Henry Wallace, Modecai Ezekiel, and F. D. R. swallowed the full-employment bait held out by Beveridge, but ignored or overlooked the hook embedded in the bait. Now our labor leaders have swallowed the bait, but they also have overlooked the hook. What did Beveridge mean when he said, "The state cannot undertake the responsibility for full employment without full powers. If trade unions under full employment press wage claims unreasonably, maintenance of a stable price level will become impossible; and wage determination will become a function of the state?"

In plain English, Beveridge's statement means that workers will be told where they must work, what hours they must work, and what wages they must work for. That is exactly where the followers of Mussolini, of Hitler, and of Stalin finally landed. It happened in Italy, in Germany, in Russia; and it can happen here.—Noah M. Mason.

There are some things which we cannot tolerate and have America remain the America which our forefathers founded and the kind of government which has brought its people the highest standard of living the world has ever known. The government of this nation belongs to its people, not the people to their government. The American people, certainly the people of the South do not believe in centralized planning, in regimentation, in bureaucratic control, in government by man rather than government by law.

Nearly all the straight lead ore mined in the United States in 1945 came from Southwestern Missouri and 92 per cent of the crude zinc came from the Tri-State area, Missouri-Oklahoma-Kansas, with Oklahoma maintaining its traditional leadership in the production of this ore. Missouri turned out 178,000 tons of the national total of 203,076 tons of lead; Oklahoma produced 70,790 tons of zinc out of a total of 165,960 tons.



"What Enriches the South Enriches the Nation"

GREAT AMERICAN HEADACHES

An overwhelming majority of the American people are worried—and they have cause to be—about three primary things: (1) The size of the public debt which is rapidly approaching three hundred billions of dollars; (2) The threat of inflation, caused in large part by the government paper, constituting this debt, held in private hands; (3) The ever increasing encroachment of government into the lives and fields of activity of the citizens.

The first of these "great American headaches," the huge public debt, was caused by war and by pre-war social experimentation. Its increase can be checked and it can be gradually reduced by a prudent fiscal policy and administrative common sense. It is with the second and third that this editorial is concerned.

When a government needs money to pay currently abnormal expenses, it borrows that money just as a private business does when faced with a temporary unusual condition. When the crisis is passed, the private business that wishes to remain solvent, takes stock of its remaining assets and makes plans to pay its debts. It plugs up every rat hole of unnecessary expense. It sells those of its properties that are losing money or those that earn so little as to be not worth the carrying charges on investment. With the money thus saved and the assets thus converted, it makes a down payment on its loan, tightens its belt and strives to earn enough in the future to pay all of its debts and face the world with a clean slate.

What applies to private business, in common honesty, should apply to government in which we are all stockholders.

We can not plug up the rat holes and fill in the cess pools of governmental inefficiency until our *elected* representatives have intelligence enough to point them out to us. This can be done (as it is done in business) by concentrating on one hole or one pool at a time and, when that has been filled, tackling the next one.

The disposal of expensive liabilities can be handled in exactly the same way. And the government owns or controls many such liabilities which, in private hands, can be converted into national assets that would pay taxes to support, rather than be drains upon, the government. There are scores of such spurious assets in government hands. The TVA and REA are the first two of the many that immediately come to mind.

So we see a strange situation; a government owing a tremendous sum of money to its own citizens, and owning and attempting to operate white elephants which private enterprise should be glad to buy and could undoubtedly operate at a profit. If any doubt exists as to the ability of private enterprise to operate at least some of these enterprises at a profit, a glance at the history of the railroads before, during and after World War I should go far to dispel that doubt. It is true, also, that in private hands if an enterprise fails it is private loss. In government hands it never dies. It is always ailing at the taxpayers' expense.

The wherewithal to buy these government businesses which belong in the sphere of private business is stuffing the pockets and the banks of the nation. There are countless billions of dollars begging to be gainfully invested. Look at a statement of any bank, anywhere, in the country.

Profligate spending of paper assets is the primary cause for our justifiable fear of uncontrolled inflation.

Thus we see in the government an owner, deeply in debt, who has acquired something that he never should have had, and doesn't know what to do with it. At the same time we see potential buyers to whom the present owner owes many times more than needed to consummate a sale. But that is not all. The present owner and debtor is trembling at the idea that the potential purchaser will dissipate his present assets and cause a national calamity in so doing. The mere existence of this condition is all that is needed to prove that the job of government is to govern and that it should return to, and leave with, its citizens the opportunities for creation of the wealth necessary to support it.

SPARE THE TREE

Taxes of any kind whatsoever are a drain on productive capital. They are the price that must be paid for the services of government. Many of these are essential to the owners of productive enterprise if not to productivity itself. Viewed from this standpoint it appears that the determination of the proper form and amount of taxes rests upon two questions:

(1) What services by government are essential services?

(2) From what sources may taxes be derived with least oppression to productive enterprise?

Judging from the records of history, the second question can be more readily resolved than the first. Government services have largely followed public demand and the present trend is in the direction of ever increasing government service. Political aspirants being what they are, it seems almost too much to hope that the trend will experience more than temporary reverses. A congressional measure, recently passed and signed by the President, delegating authority to the chief executive to reorganize and consolidate government agencies, holds out some hope of a slowing down of the rate at which government employees have increased in number in recent years. Too much, however, cannot be expected from this effort in the way of substantially lightening the burdensome load of taxes which productive enterprise already bears.

In the selection of types of taxes, Congress has a record of having exerted greater freedom of action. This, together with the growing realization on the part of the American people that repercussions from overtaxed business strike at every home and individual, gives hope that system of taxation which gathers fruit from the branches but spares the tree will be given early attention. Most legislators are coming to recognize the urgency for removing top-heavy income taxes from the shoulders of business. They recognize also that if the federal budget is to be brought in balance within the next two years, as most authorities agree is desirable, some new form of taxes must be devised to make up the deficiency that will be created by diminishing income-tax returns if these are modified. Prominently considered among such replacement taxes is a federal sales tax.

During the past decade the sales tax has proved its merit. Federal use of it in the case of automobiles appears to have produced satisfactory results and the record of its use by the states has been outstanding. As early as 1934, sixteen states had sales taxes all of which were initiated during a period of business depression. Since that year, use of the sales tax has spread to 23 states. If the tax is suitable for the states, it should prove even more suitable for the federal government inasmuch as no interstate complications would be involved. It is also a matter of record that sales tax administration has encountered less litigation in its use by the states than has any federal tax in use by the national government. There seems no reason to assume that the federal government could not administer a sales tax as economically and efficiently as can any state.

The argument that a sales tax is inflationary and increases the cost of living for wage earners has been worn threadbare by the labor unions. As generally agreed, all taxes are necessary evils. To this may be added that all taxes are inflationary so far as increasing the cost of living is concerned. It is the ultimate consumer who pays them, regardless of whether they are levied on income or product, directly or indirectly. A far bigger question is the one of maintaining business productivity at maximum levels, thereby enabling the mass of consumers who are also the nation's producers to absorb the "necessary evil" with a minimum of hardship and inconvenience.

It has been estimated by reliable authorities that a five per cent retail sales tax would raise from $5 billion to $6 billion of national revenue—sufficient to permit material reduction of corporation income tax rates or to eliminate the graduated feature of present tax scales. Either would go far toward freeing the flow of investment capital into producing channels, the real source of more and better jobs.

THE FUTURE— GLOOMY OR GLORIOUS?

(Reprinted by permission from Better Homes & Gardens)

Pierre Laval, an intelligent and logical Frenchman, could estimate a situation and act in accordance with the facts, without emotional bias or sacrifice to principle. After Dunkirk, he forsook France for the obvious victor, Germany.

Not long ago, Frenchmen shot Pierre Laval as a traitor to France.

After Dunkirk, Winston Churchill led an almost defenseless England. Did he follow the logical path and sue Hitler for an ignominious peace? Listen instead to him saying, "We shall fight on the beaches ... we will never surrender!" How pathetically futile those words sounded in those desperate days! In spite of the facts, almost in defiance of reason, Churchill spoke.

Who was right, the man who was guided by the facts, or the one who stood by his duty, in spite of the facts?

I ONCE KNEW a man of superior intelligence and experience who undertook to engage in the contracting business. He did not last long. He thought every proposal completely thru; he was able to foresee and to provide for every possible circumstance. As a result, his bids were always so high that he failed to secure work. He was, literally, a victim of his own foresight.

I suppose that no one would be foolish enough to advocate action without intelligent planning, but it is evident that the man who thinks too long is just as likely to be wrong as the man who is willing to take the future partly on faith, not trying to foresee the solution of every imaginable difficulty—leaving a little to favorable chance.

MANY OF US today, amid the inevitable reaction from the strain of war, are likely to think too long and too gloomily about the future, and to possess too little faith in that future. We see quarreling between management and labor; we find everywhere a breakdown in public decency and morals; we see the world frighteningly menaced thru unleashing of terrific powers of destruction which we feel incapable of controlling. We are conscious of an uneasy feeling of being adrift in a river above some thundering Niagara. We long for the old lost securities—for life that was lived by established rule. As 1946 begins, we have just passed thru a moral Dunkirk. We have seen the old limits imposed on action by moral law thrown aside by all hands in the interest of expediency. Human nature has revealed to us again how near to the savage it remains. The plighted word has been reduced to the status of a mere convenience of the moment. No wonder we stand aghast and afraid!

WHAT SHALL we do, then, as we view this material victory and moral defeat? Shall we go over to the enemy and secure for him his victory? Or shall we fight behind every bit of cover for the things in which we believe?

In England's stand proves anything, it proves that faith, fortitude, and moral impulse are at least as reliable guides to action as is the purest and coldest reason. We need to see clearly that in these troubled days human association is undergoing a transformation that we can make—if we will—a glorious one. We need to believe that thru our unflinching effort and stalwart faith there will be born some day a new civilization which will compare to that which has been, as the butterfly compares to the worm.

IS THERE CAUSE FOR WORRY?

Passage of the Hobbs anti-racketeering bill would constitute, according to the recorded opinion of the CIO News, "something worse" for unions than would passage of strike-curbing legislation. The bill, directed at bringing unions within the scope of laws banning robbery, extortion, force and violence, actual or threatened, is claimed by its sponsors to be aimed at stopping large city unions from exacting tolls from incoming truck drivers before they may enter the cities. Such tolls are nearly always collected through threat of violence and if attempted by other than union members would constitute highway robbery in the eyes of any American court.

If the Senate concurs in the House action and the President approves the bill, unions will be deprived of this so-called privilege. At first glance it would seem that unionism would lose little thereby. Advantages under the toll-exacting procedure are limited to small financial gains by a few big-city AFL teamster locals. But here is the CIO, with no apparent interest in the primary functions of the bill, raving to high heaven that Truman has done 'em wrong by having, in the words of the CIO News, "emboldened Hobbs and his gang to put the bill to a vote and to get it passed." Why is this bill worse in the eyes of labor bosses than anti-strike legislation?

The only plausible answer seems to lie in the probable realization by labor moguls that many other union activities fall within the category of robbery and extortion, force and violence, actual and threatened. When initiation fees and dues are exacted as the price of a job from a worker who wants none of unionism—is that extortion? Or is it just plain robbery? When orderly American citizens, desiring only to go about their own business, are halted by picket lines—are they restrained by force or violence, actual or threatened?

Maybe Mr. Murray's News (or does it belong to Mr. Hillman?) has good cause for its alarm. Maybe the Hobbs Bill is "worse" for unionism than the B-B-H bill or President Truman's fact-finding proposal or any of the other strike-curbing plans being considered by Congress. But on two scores the News can be assured. The American people are against racketeering, by whomsoever committed. And no person who conducts himself in legitimate fashion need fear unjust treatment at the hands of an American court.

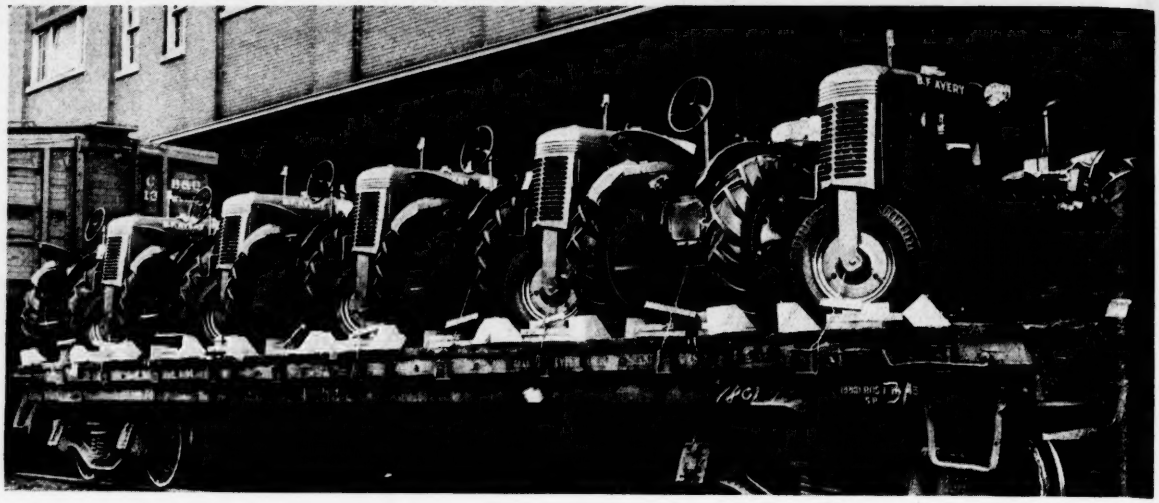
PROSPERITY BEGINS AT HOME

If facts are facts it seems evident that an integrated nation like the United States cannot gain much for itself through foreign trade.

It may be said that no nation has ever yet attained complete self sufficiency, and that none ever will, unless or until chemurgical and scientific developments shall have produced substitutes for commodities that are not indigenous. As a result, there are a number of exotic products for which the United States will have need, and these furnish a basis for useful international trade. They constitute, however, but a minor percentage, probably around five per cent, of this nation's consumption.

Rather than build aircastles for employment and economic gain around the possibilities in foreign trade, better ultimate results might be reached by viewing the situation from a realistic standpoint. Foreign nations which have nothing to export that we NEED to import will only be able to buy and PAY for American goods when they themselves shall have become industrialized and thereby self sufficient. When they reach this stage their need for American goods will decline or vanish.

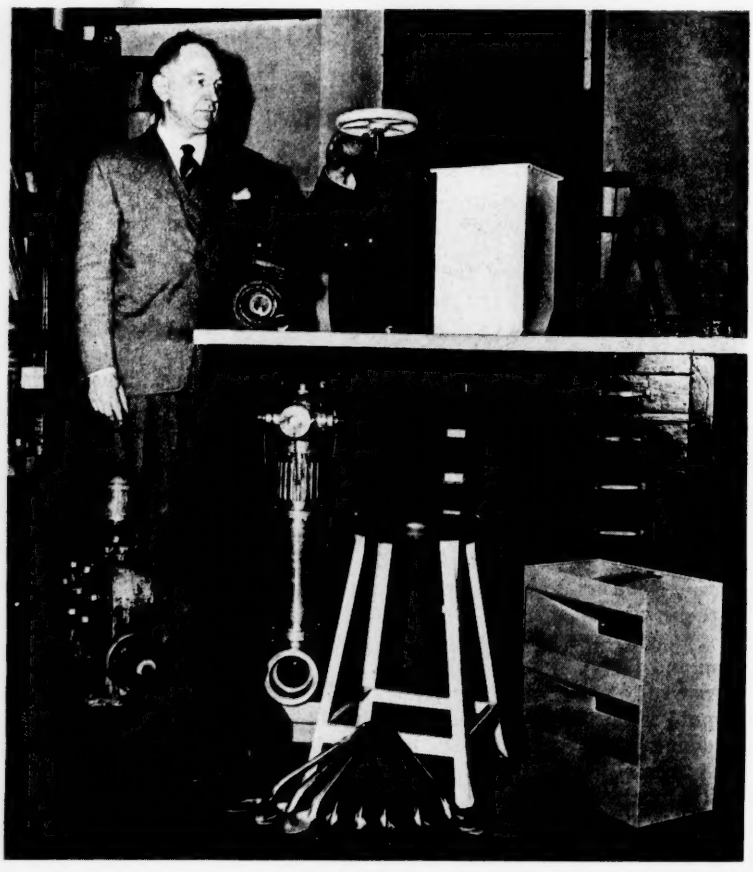
Foreign trade, if viewed realistically, can only be considered, from the standpoint of the United States, as a more or less altruistic effort to elevate the living standards of destitute nations, and in this manner contribute to the maintenance of world peace. Progress for the United States itself lies within its own boundaries.



LOUISVILLE RECONVERTS

this year's production put at $840,000,000

by
Paul Hughes



LOUISVILLE area manufacturing plants that made such a notable contribution to the war effort today find themselves in the van of American peacetime production, and with the minimum of fuss and fury. There has been an astonishingly small delay in changeover.

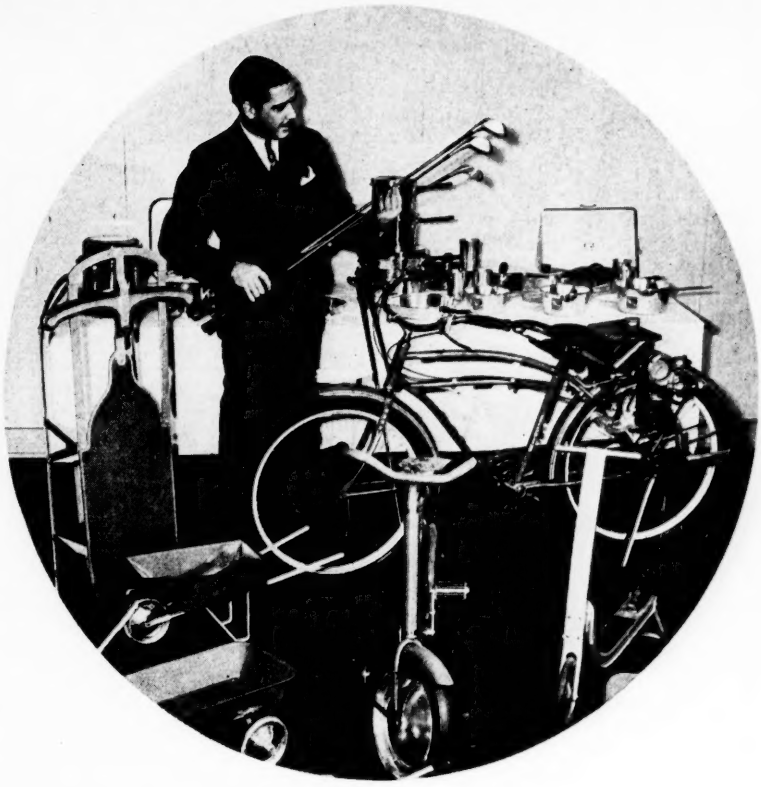
The shift here—the industrial district of Greater Louisville includes Jefferson County, Kentucky, and two counties across the Ohio River with their booming cities of New Albany and Jeffersonville. This area turned out manufactured products in 1939 worth $325,000,000; in midwar—1943—the total had skyrocketed to $805,682,000, and the estimate for 1946 is a thumping $840,000,000.

Today, eight months after the end of the war in Europe and four months after Japan's surrender, the shift from powder, shot and shell, incendiaries, military ve-

Top of Page—Production of Avery farm tractors will soon be trebled. Shown are units headed south and west from Louisville.

Left—Spoons, stools, cans, bins have been added to fire hydrants and pumps made by Vogt Brothers.

Right—Sleds, bicycles, scooters, wagons, barrows, pots, pans and golf clubs will be made by Reynolds Metals plants.



hicles, electrical equipment, naval ships and supplies, bomb fuses, and scores and scores of other war items, to the heartening everyday commodities to make living easier is a feat of genius and enterprise befitting the best American tradition.

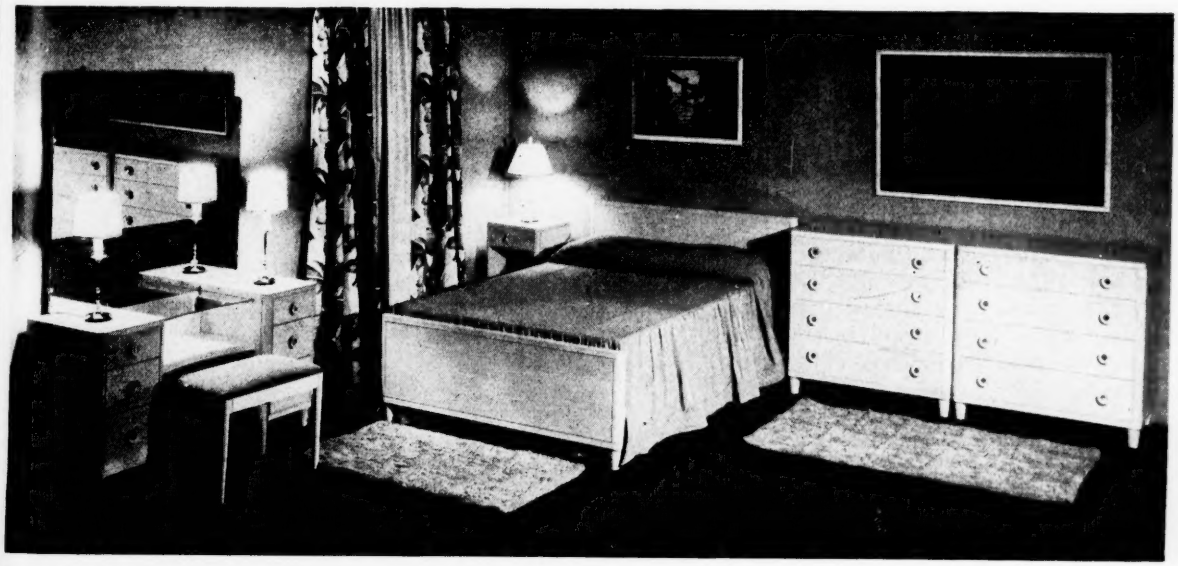
The same industrial acumen that put Louisville and environs into the forefront in filling Allied arsenals has been coupled with native know-how to fill the needs of people here and everywhere who want most of all to get along — and enjoy life while they're doing it. It is because of this combination, plus ability of labor and management to work together, that leaders look to the Louisville area's unique record as an asset to attract new industry to Kentucky.

With such little hubbub that few on the outside knew what was happening, pots and pans, tractors and trailers, beds and vanities, Christmas tree holders, cigarettes and liquor, radio tube parts, builders' iron and farm wagons, deep-freeze refrigerators, kitchen stools and garbage cans, spoons and spigots, rubber and synthetics began to pour from factories. A few samplings suffice to tell the story—too big, really, to begin to tell in individual recitals all the way down the line.

The Vogt Brothers Manufacturing Company, for instance, is an oldster in Louisville's industrial picture. It used to specialize in Reilly pumps, along with industrial valves and fire hydrants. There was hardly a city or town in the country that didn't know those products. During the war Vogt Brothers made pot-type burners for field kitchen bake ovens, reconversion sets for gasoline lanterns, basting spoons, fuel tank straps, bail pumps, rockets, nozzles, valves for ships and fire hydrants for army camps.

Now Vogt Brothers offers, in ad-

Below — Mengel Company's newest styles in furniture. The company operates five plants in the Louisville area.



Right—Aluminum furniture for living room, lounge or garden is tried out by Keen Johnson, former Kentucky governor, and Miss Carole Stroebel.

dition to its old standbys, steel and aluminum spoons, kitchen stools, garbage pails and flag and flowerpot holders. The factory is bigger than ever, and busier than ever. Distribution and sales plans occupy the management's attention. The wartime personnel is virtually intact.

Cochran Foil Company, headed by Archie P. Cochran, helped Uncle Sam by making anti-radar items, 37-mm shells, armor-piercing shell fuses and aerial bomb fuses. The plant now is back at work on its main effort, foil packaging materials — wrappers for cigarettes, candy, gum and the like, Christmas decorations, permanent-wave pads, electrical container material and heat insulator items.

"The end of the war brought very few reconversion problems," said Mr. Cochran. "Some of the government-owned machinery will have to be reconditioned and shipped—some already has. This, however, is requiring but about sixty days. In the meantime our production of aluminum foil is going ahead on the same expanded basis. The demand is greater than ever before. Our present plans call for three and a half times the number of employes we had in pre-war days and this will be increased when our export business starts, and we hope this will be in the very near future."

The Mengel Company, for generations a Louisville old-reliable, made shipping containers, shell cases, army cots, laminated sections for airplanes, government furniture, and the like, during the war. Now it is stressing permanized furniture under a nationally-advertised trade mark, along with containers for a long list of customers in the cigarette, soap, food, and similar fields; mahogany veneers, plywoods and allied products.

The company, doing an annual volume of $26,000,000 and in the Louisville area alone operating five plants asserts it is the leading producer of corrugated containers and the largest manufacturer of hardwood products in America.

"Mengel's plans for the future, through research and product improvement and expansion into new fields, will mean continued growth and increased employment for its three main divisions," said Alvin A. Voit, president.

Kentucky Manufacturing Company's war effort centered chiefly on heavy all-steel military vans, four-wheel trailers and semi-steel and grey-iron castings. Now, as before the war's interruption, the old firm is making farm wagons, commercial freight-carriers and trailers. Robert C. Tway, president, states that reconversion presented "very few problems, as our war work was a continuation, on an expanded basis, of our peacetime operations."

The B. F. Avery Company plant, oldest farm implement manufacturer in the nation, is back in the same field, turning out tractors for farm use—this item's production shortly will be trebled — and other items that have been going to farmers in the South for many years. During the war Avery made heavy forgings and, since farming was in itself so great a part of the war effort, furnished farm equipment under War Production Board orders.

Listen to Philip H. Noland, president: "Prior to the war we concentrated our efforts in the South, doing an annual business of from $2,500,000 to $3,000,000 through our ten branches. We were then employ-

(Continued on page 74)

Right — Kentucky Manufacturing Co. made military vans, four-wheel trailers and castings during the war. The trailer is one of the first post-war vehicles.

TARGETS FOR SOUTHERN AIM

THE best foundation for success of Southern expansion and development, now gaining full headway, is to be found in the philosophy of taking a sure aim at positive targets. This is the conviction of Lewis F. Gordon, vice president Citizens & Southern National Bank, expressed at the annual meeting of the Railway Development Association of the Southeast, held in Atlanta. It would be hard to present facts in support of this idea that would be more to the point than those expressed by Mr. Gordon. Following are extracts from his address:

Lewis F. Gordon

"To accomplish our objective two broad phases of activity are necessary: (1) Sell what we have; (2) Get what we need. Many communities, like Topsy, 'jest growed up.' In other words their development has been more a matter of combined circumstance and opportunity, rather than any question of studied planning. It is true that none of us can look too far ahead—as evidence the traffic problems of large cities which were developed with no foreknowledge of the automobile—but insofar as it is possible, planning ahead is certain to help. Moreover, it would appear that we of the South have some distinct advantages because we can profit from the 'trial and error' method out of which many northern communities evolved.

"Against this broad background, what must we do to sell what we have? We must know what it is. We must determine where it can be sold. We must determine who should buy it. We must have a plan for selling it. By 'it,' in every case I mean the community, its resources, labor, raw materials, geographic location—whatever we are undertaking to sell, translated in terms of specific interests of the prospective buyer. Obviously, the answers to such an approach can only be obtained by a close and detailed study of the community or trade area.

"However, that is only half the picture. The other half and, in many respects, the more important half is to get what we need. You never saw an industry or business begin to flourish but what you saw a certain number of men cross over from other lines of business to become competitive. The result in many instances is overdevelopment and economic loss for all concerned. Here again we tie back into studied consideration of present conditions in a community or territory. What units are already existent? Do they suffice to take care of the needs of the community or trade area? On the other hand, if we find in a survey of a community or trade area that it is lacking certain needed types of production or distribution, we have not only set up the finest kind of objective targets, we have also evolved the finest kind of sales argument.

"It is hardly necessary to suggest that you are steadily besieged with requests from communities—'Get us an industry, a mill, a factory.' The answer to such a request ought to be —'What have you to justify it? If we were able to bring a large mill here, could you take care of it? Could you house it, church it, school it, feed it—in terms of scores of new families whom it brought into the community?'

"I have always felt that the development of the beef cattle industry in Georgia represents an outstanding example of intelligent planning and execution of a program. It was decided to begin with the 4-H clubs and Future Farmers of America. We devised an application for a loan to buy a calf. In the course of the last 12 or 15 years, our bank has literally made thousands of such loans, and I doubt if we have ever had a loss. Out of that came breeder and feeder loans to farmers. Live stock associations were organized — cattle auction sales points were created—and today Georgia has a flourishing cattle industry.

"Again I say, it represented careful study of a need. That is the only principle on which sound, constructive agricultural or industrial development of the South can be carried forward successfully; and it is the type of planning and development to which you, the railroad development men, can contribute much. We must not seek to motivate development or bring in an industrial unit merely to have such a unit. Rather it must be predicated on the fact that it makes a direct contribution to the progress of our economy, either in utilizing natural resources which have been lying dormant or in providing products for the area at a lesser cost or some similar contribution.

"It lies within the memory of all of us to recall the time when the South was classed as the nation's 'Economic Problem No. 1.' As indicative of such fallacious thinking in that period, it is interesting to note that our area is now hailed as the nation's 'Opportunity No. 1,' and that great things are being predicted for it. My mind goes back to a prewar conversation with an official of one of the largest milk processing companies in the country. He made the flat statement that his company would put one or more processing plants in the South any time they could be assured of a continuous basic supply of milk.

"The by-product effect of such development is in certain respects more significant than the development itself. This is best understood when we take 1940 figures which showed that agriculture employed less than 20 per cent of the workers; the manufacturing consist-

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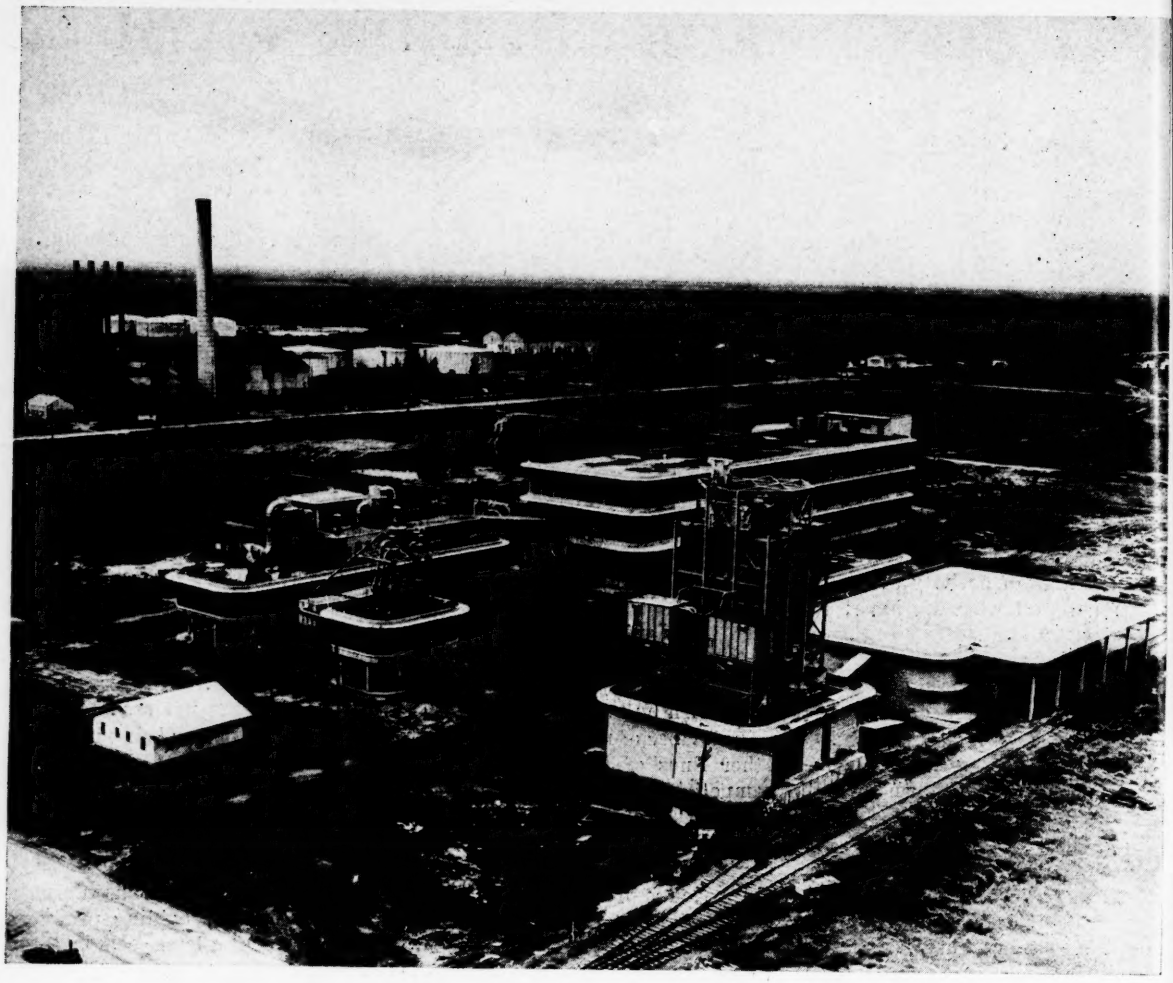
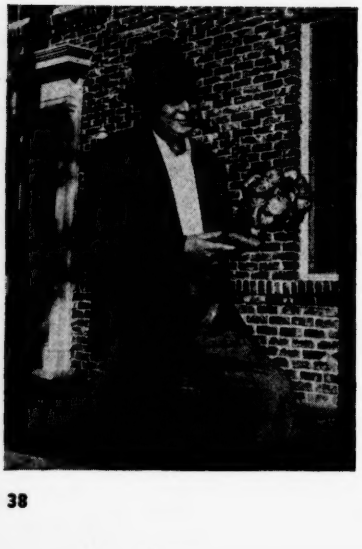


U.S. Sugar Begins Operations at $7,000,000 Starch Plant



A $7,000,000 root-starch industry, utilizing 12,000 acres of reclaimed Everglades, and employing 2,500 persons, was announced early this month by Clarence R. Bitting, president of the United States Sugar Corp.

Already turning out test runs of high-grade starches and derivatives, the starch-house must await the growing and harvesting of a new crop of sweet potatoes to supplant its hurricane-damaged raw product before commercial production can begin next fall. The September storm that swept across Florida, accompanied by torrential rains, water-soaked and ruined three-quarters of the current crop in the fields, and otherwise delayed test and training runs at the starch-house, which was scheduled to begin its annual production of 75,000,000 pounds of root-starches before the end of 1945.

Left—Clarence R. Bitting, president of the United States Sugar Corp., holds a yam in his right hand, a starch potato in his left, showing size comparison.

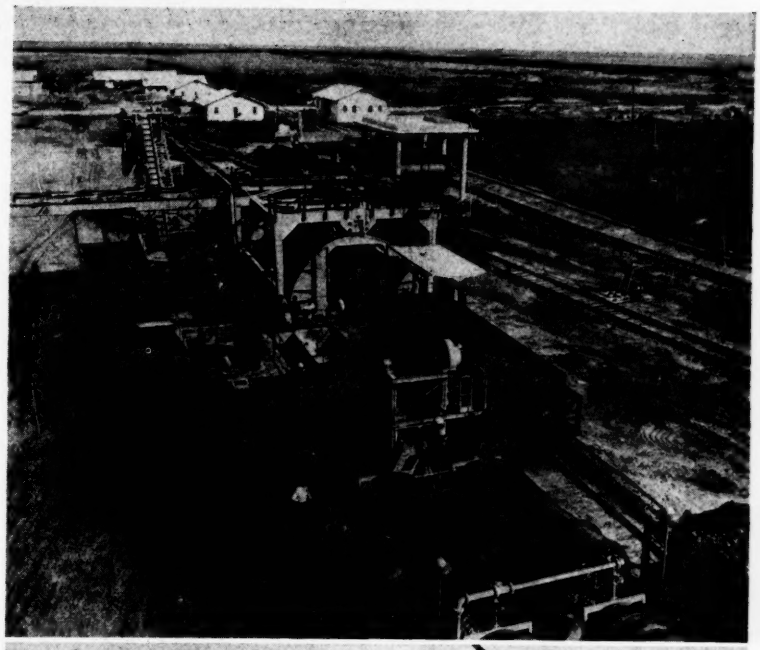
Second largest individual enterprise in the Florida Everglades, after sugar production, the starch plant marks a sizeable addition to the agro-industrial center the corporation is building in the heart of the Everglades on the southern rim of Lake Okeechobee, and removes another product from the list of essential domestic shortages these Everglades producers are combatting.

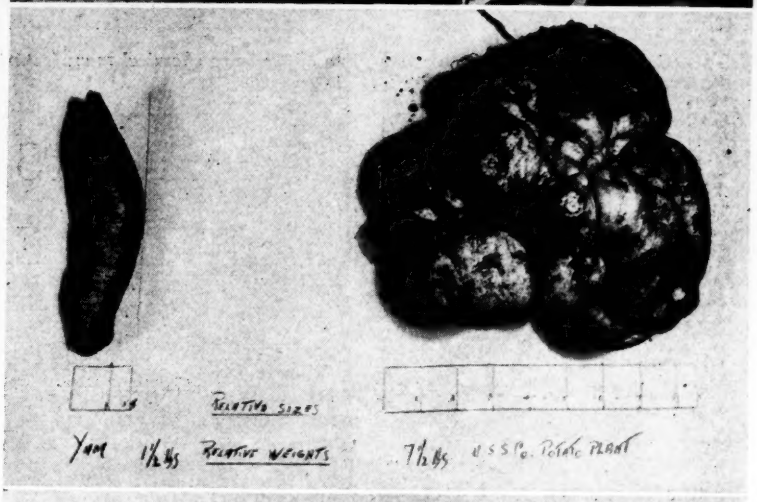
"The beginning of commercial production of root starches marks another significant milepost in the development of the Florida Everglades—the last frontier of the United States and the most productive area of like size in the world. In that development, I take great pride and satisfaction," Mr. Bitting said in announcing the beginning of starch operations.

Right—Top—Carloads of potatoes arrived at the starch house. A tilt-table dumps the load in the soaking pit from where the potatoes are conveyed to tumbling washers and brush washers and then elevated to a storage bin.

Right — Middle — Starch potato and ordinary yam to show comparative sizes. The yam weighs 1½ pounds; the potato, 7½ pounds. Some of the latter grow as large as 18 pounds. They contain a much higher starch content.

Right—Lower—Harvesting starch potatoes on a Sugar Corporation plantation. Yields range from 500 to 700 bushels per acre.





"Back of the root-starch development," Mr. Bitting said, "lies more than ten years of applied research. Test runs indicate that the possible input is more than double that estimated when the plans were drawn. Recent yields from test plots are more than double those of five years ago. The cause? Applied research," he emphasized.

Applied research on arrowroot, the finest in starch, has already been extended to commercial scale plantings and it will be but a short time until both sweet potato and arrowroot starch are being produced in the starch-house, Mr. Bitting announced.

"Because of the achievements of the corporation, other interests are now constructing a sugar-house in the Upper Glades and still another company is planning a sugar-house for near-term construction," he reported. "Results in connection with ramie have caused widespread plantings and additional decorticating and degumming facilities to be provided. The example set by the corporation has interested others in development of improved pastures. And so the list can be continued, but the examples are sufficient to show the role played by the corporation in the development of the Everglades. And as yet the surface is hardly scratched."

The starch-house, largest and most modern of its type in the world, consists of five buildings covering six acres of ground, with content of all structures in excess of 2,500,000 cubic feet. In addition to its starch output, it will produce annually some 30,000,000 pounds of by-product materials for livestock feed.

The project represents a substantial part of the company's $20,000,000 diversification program. With its new starch-house and the sugar-house, largest in continental United States, the sugar corporation will provide jobs for more than 7,500 persons with a yearly payroll approximating $10,000,000.

For the expanded operation, the company has constructed a water system capable of serving a city of more than 200,000 population. Some 4,000,000 gallons of water daily are taken from nearby Lake Okeechobee, and a complete waste disposal plant returns the water to the lake in a purer condition than when it was withdrawn.

Steam generating facilities have been

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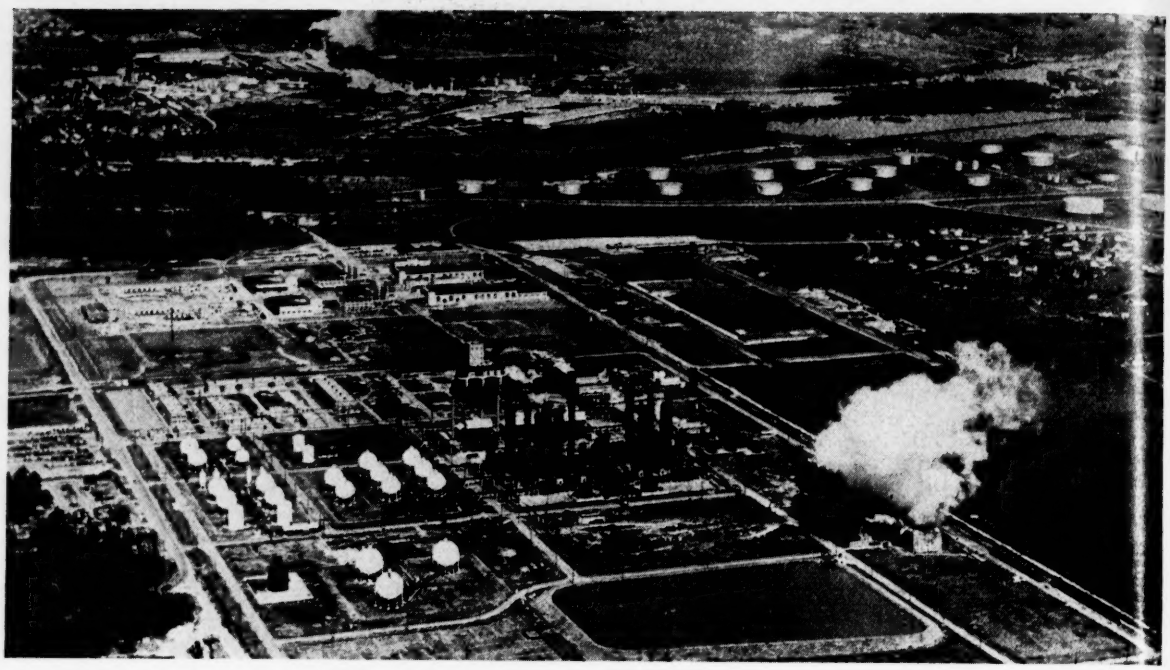


Goodyear synthetic rubber plant, one of 29 large chemical manufacturing enterprises at Houston, Texas.

HOUSTON'S PROSPECTS GOOD FOR HOLDING WARTIME EXPANSION

by

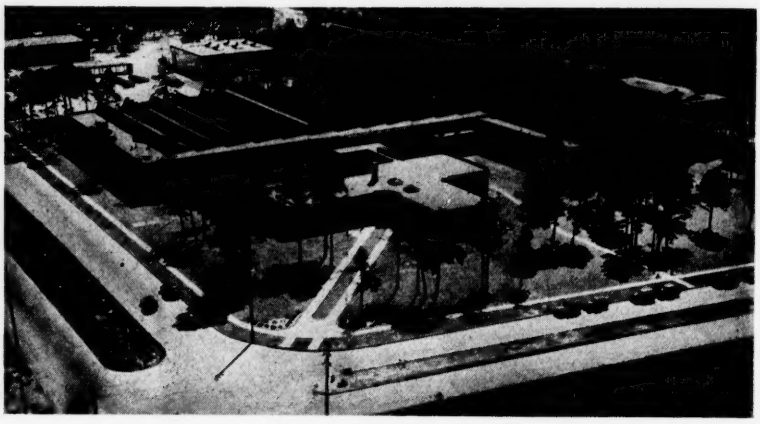
James A. Mabry

HOUSTON, often referred to as the depression-proof city because it has never experienced a recession of business, is adjudged to have superior prospects of retaining the wartime growth it enjoyed between the years of 1940 and 1945. The prediction was made by Philip M. Hauser, of the Bureau of the Census, who studied the city and projected its possible growth or decline.

To hold its population Houston must provide jobs, good living conditions and cultural advantages to its residents. The success of this aim has not only the full cooperation of every business man and industrialist but also the enthusiastic support of every Houstonian. People are as optimistic about the future as they were cheerful during the days of the depression a decade ago.

During those days of the deep depression this city had many of the indications of a boom town. Its population increased a third during the 1930s with few signs of unemployment while other parts of the nation wrestled with the problems of breadlines.

Metropolitan Houston's growth has been fast, but solid. In 1900 the population was only 44,633 and the city had only 145 industrial establishments. The 1920 population was 138,276 and the city at that time had 383 industrial firms. By 1940 the population had grown to 383,514



Right—The modern plant of American Can Co., which has been reconverted to peacetime output.

and there were 589 manufacturing plants in the city. During this 40-year period the number of manufacturing plants had increased 306 per cent; the number of wage earners had increased 389 per cent; the wages had increased 1067 per cent and the value of products had increased 1800 per cent.

With the threat of war and the national defense program it was realized that the potentialities of metropolitan Houston as an industrial city had as yet hardly been scratched. A huge steel mill and rolling mill was one of the first new industries to be built. With its completion a number of steel fabricators and manufacturers of products made from iron and steel were attracted to Houston, and are remaining here for peacetime operation.

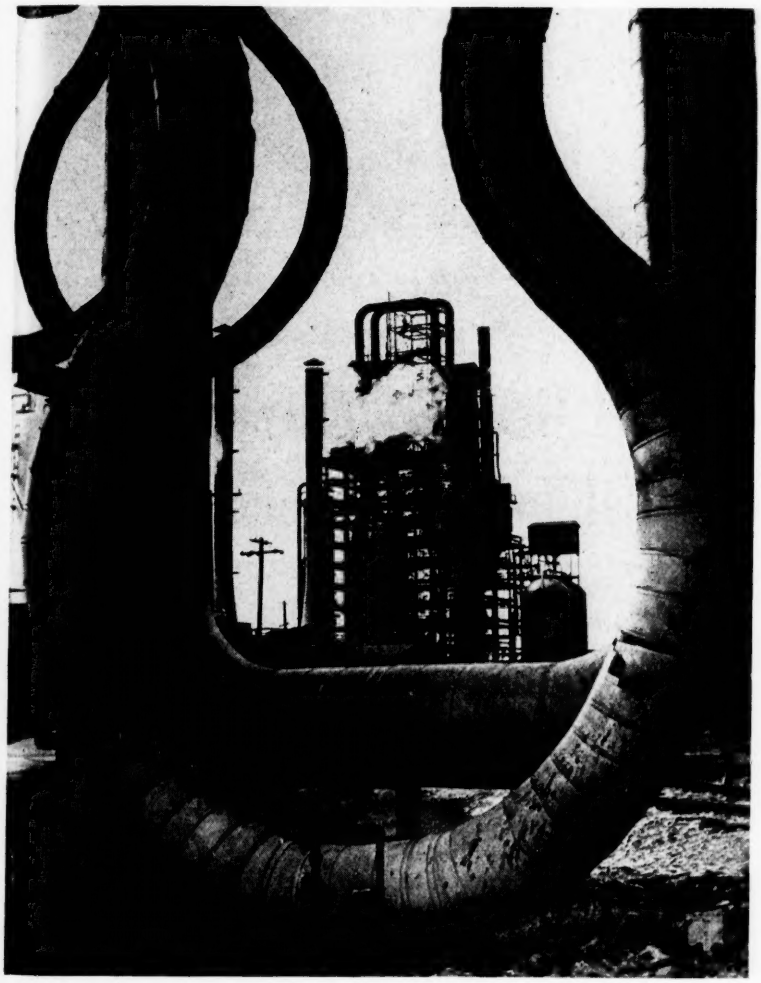
Houston for many years had been a center of oil field tool and equipment manufacturing, and huge plants manufacturing products from alloy steels were operating to capacity at the outbreak of the war. The facilities of these plants were ideal for the manufacturing of war materials and the government placed many millions of dollars in orders with Houston plants. Little change was necessary in plant set-ups and the switch-over from the manufacture of peacetime goods to wartime goods was simple. In the same manner the switch-back to the production of their peacetime commodities has been easy to work out. In most cases all that has been changed in the original plants' lay-out is the expansion of prewar capacities. These expanded facilities are being sought by the manufacturers whose backlogs of orders will require larger production, and this in turn will mean more employment, larger pay rolls and more money in circulation.

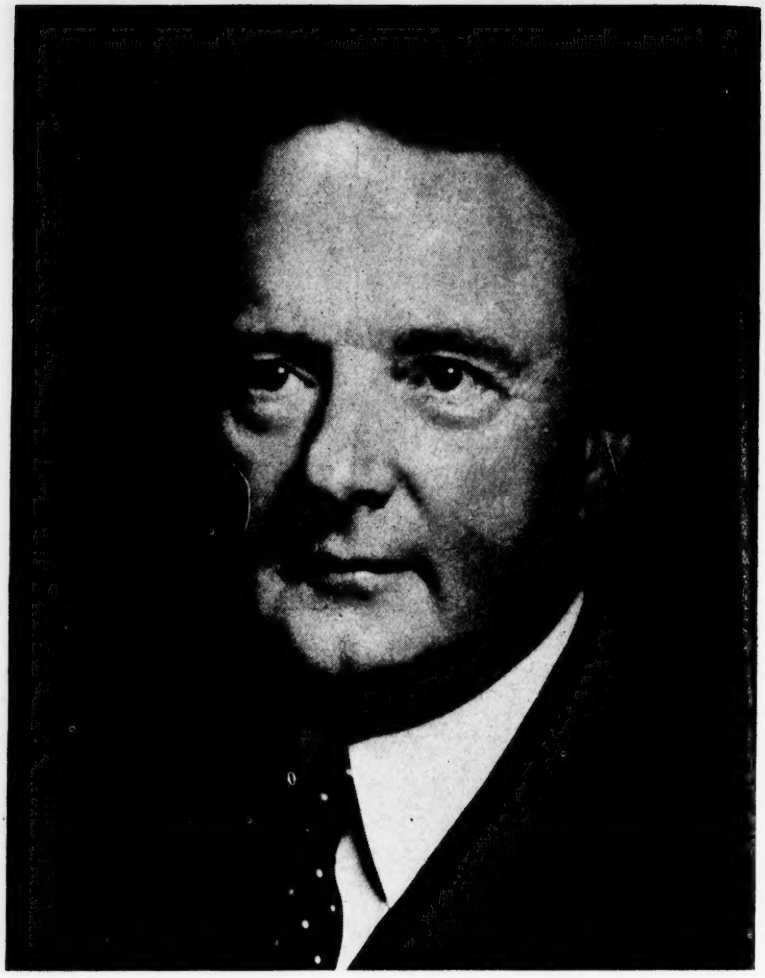
The Houston Lighting and Power Company has prepared a study of population trends in Houston covering the next 10 years and predicts a population for Houston proper of

(*Continued on page 66*)

Above — Mass production by one of Houston's largest manufacturers of oil field tools. One of several hundred producing for the oil field industry, this firm and most of the others were engaged in full time war production. When reconversion was faced, there were very few problems in this phase of the city's industry.

Below—A large Houston refinery.





Senator Harry Flood Byrd

Mutual Responsibility Essential To Labor-Management Peace

by

Senator Harry Flood Byrd

(Virginia)

A CONTRACT between two parties without mutual responsibility is meaningless, and that is the simple premise of Senate Joint Resolution 133 as it applies to labor and business organizations contracting with each other.

Labor unions have a proper place in American economic life because of our inherent right to organize, and those of us who advocate and believe in collective bargaining do so because we believe in fair play and always have understood a bargain made is equally binding upon both parties.

It must be recognized that labor unions and collective bargaining are here to stay, and we know now that labor unions have grown up. Actually they are big business whose actions affect the whole public welfare of the nation, even to the extent of being a vital factor in the meat supply for our tables.

Powers Abused

In years gone by industrial corporations undoubtedly abused their power, resulting in the creation by Congress of the Securities and Exchange Commission for the protection of public welfare. This agency has carried out the purposes of the law in a satisfactory manner. Now the shoe is on the other foot for labor unions wield great power which is easily subject to abuse to the distress of all.

So, we must conclude that if we are to have orderly business and prosperous conditions labor unions as such and the owners of industry have a mutual responsibility, for one is dependent upon the other. This means that legally both labor unions and owners of industry should have the same responsibility for performance agreed to under contracts between them. This equality and mutuality of responsibility does not exist at present.

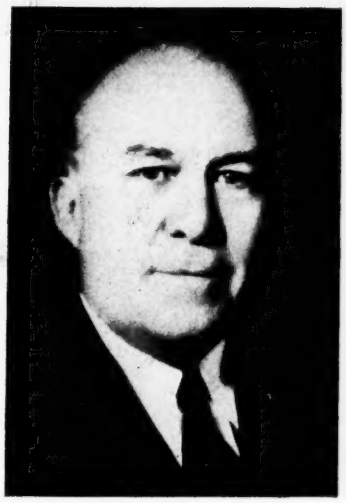
Under conditions as they have developed there is no reason for exempting labor unions from damages resulting from broken contracts, while citizens and business corporations can be sued for contract violation. For years we have seen repeated instances of broken union contracts. Some have been broken in sympathy strikes where the strikers had no grievance against their own employer, but struck to encourage and support strikers employed elsewhere. Some contracts have been broken in jurisdictional strikes arising from disputes between two or more unions, but with no grievance against the employer or the public who had to suffer the consequences.

Fair Minded Will Agree

All fair minded labor and employers of labor will have to agree that this lack of responsibility has reached a stage where action by the Congress is overdue. What to do is difficult and whatever is done must be accomplished without infringing upon the rights of individuals, and in full justice to labor unions. The plan I have offered in the form of S.J.R. 133 which was referred to the Senate Judiciary Committee was

(*Continued on page* 64)

Reynolds Plans for Civilian Production



R. S. Reynolds

BEFORE the war Reynolds Metals Company was primarily a roller of metal foil—the largest in the world. The metal foil alone and in combination with other materials was used extensively by candy, tobacco and other industries for packaging their products. Reynolds also designed and printed colorful foil packages with high display value for cosmetic and toiletry manufacturers. Aluminum foil labels for goods packaged in cans, glass or boxes were made by Reynolds, using their special printing process which allows the foil to be printed in many colors.

Today Reynolds is producing for the world of tomorrow. Their engineers and scientists have designed railroad box cars and refrigerator cars, trucks, trailers and less-than-carload containers of aluminum; automobiles constructed largely of aluminum are under consideration. Foil labels designed for post-war competition are coming off the presses. For use in the home, the company is producing a line of de luxe cooking utensils made of aluminum, rolls of aluminum foil to be used in the kitchen and many other places in the home, and fabrics woven with aluminum thread that will not tarnish and can be dry-cleaned.

Below—R. S. Reynolds, Jr., and Innes Mahon, a division head, examine a home freezer unit.

To the railroad industry Reynolds has offered new improvements on conventional railroad cars. Company engineers went to work on plans for a box car made principally of aluminum and designed a model that weighed 10,000 pounds less than the generally used type of box car. Its lighter weight makes possible the advantages of lower consumption of power and more rapid starting and stopping in addition to greater payloads and lower center of gravity which enables the operation of the box car in high speed trains. Aluminum's resistance to corrosion assures long life for the car. To-date thirty cars of aluminum R301 alloy have been sold and are now in service.

In conjunction with the box car, Reynolds engineers developed designs for a refrigerator car made of aluminum. This car saves about 18,000 pounds in weight. The effect of the weight-saving in this car, as in all transportation vehicles, is to cut operation costs and to increase payloads. Since aluminum reflects a substantial percentage of radiant heat, the new car consumes only twenty-six pounds of ice per hour as opposed to current consumption of from thirty-four to thirty-six pounds in standard cars.

A third development worked out by Reynolds for the railroads is the "Reynolds 3-Way Container." Made of strong alloy aluminum, it has a capacity equal to half of a box car and is considerably lighter per pound capacity than similar containers of previous design and material. A trailer frame has been especially designed for transporting the aluminum container between loading docks and flat cars. The "Reynolds 3-Way Container" is shifted on and off with the aid of built-in hydraulic jacks and ballbearing rollers. As a compact unit, it also lends itself readily to water and possibly air transit. Test models are now being used between Reynolds plants around the country. Test models of truck and trailer bodies made from strong aluminum alloys have been developed by Reynolds and are being given field tests by a large eastern urban trucking firm. The truck body saves 1,000 pounds deadweight over the conventional body used previously.

For the housewife Reynolds will manufacture in its own plants a number of products that will make easier her daily tasks. A complete line of utensils has been designed and is in production in Louisville. A recent announcement by Reynolds is their acquisition of the factories, dies and technical "know-how" of an established aluminum utensil company. Nation-wide distribution of these de luxe "lifetime" utensils coupled with extensive advertising will acquaint the American housewife with the Reynolds company which up to now has not been a producer for the utensil market. Another product for the housewife will be a roll of thin, pure aluminum foil for use in the home. It can be used to cover bowls of leftovers, for lining broiler pans and avoiding a messy cleaning job, for cooking and a hundred other uses limited only by the imagination of the consumer.

This same aluminum foil played an important war role which only recently has been disclosed to the public. Thin strips of the foil especially mounted to give it weight were dropped in bundles from airplanes flying over enemy territory. The effect of the pure metal strips floating to earth was to confuse and render ineffective the radar appa-

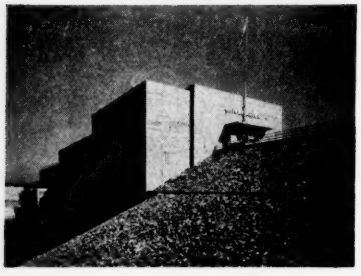
(*Continued on page 63*)

Industrialization and development of the Chattanooga Valley have moved forward together.

Chattanooga Views Future with Confidence

by
Bart Leiper

Below—Power house at Chickamauga Dam, T. V. A. project near Chattanooga.



AT a time when many other communities face disturbing economic dislocation, Chattanooga looks forward to its post-war future with well-placed confidence. A city of 137,000 with a metropolitan population of over 200,000 (estimate for 1945), Chattanooga is the state's third largest city.

Because of the topography of the region, Chattanooga depends almost entirely for its economic prosperity upon the more than 800 well-diversified industries within its trade area. During the war these plants expended over twelve million dollars in new facilities and equipment and produced war materials valued at almost a billion dollars. With minor exceptions, these plants were all prosperous producers of civilian goods before the war to whom reconversion presented no serious problem.

Since the end of the war approximately 50 Chattanooga industries have announced expansion programs totalling nearly $5,000,000. In addition, E. I. duPont de Nemours and Company has purchased 500 acres of land for the

erection of a nylon yarn plant to cost $20,000,000 and to employ 3,000 to 3,500 people. Chattanoogans have been greatly encouraged by these announcements and by the fact that the Chamber of Commerce is receiving a greater number of inquiries from bona fide industrial prospects than ever before in the history of the city.

Many factors combine to make Chattanooga a highly desirable industrial location. There is unlimited power at exceptionally low rates. Nearby coal mines provide an ample supply of cheap fuel suitable for industrial purposes. Natural gas will become a reality in 1947. In addition to excellent rail, air, and highway transportation facilities, the construction of locks and dams on the Tennessee River and the erection of modern public terminals have brought to Chattanooga the benefits of low-cost water transportation.

Impetus of the war has hastened the industrial renaissance of the South which had begun long before Pearl Harbor. Through the application of scientific research to the South's abundant raw materials, more and more of the products consumed in the South will be manufactured here. As a manufacturing center favored by location and other economic advantages, Chattanooga expects to share fully in the new prosperity of the South.

The Chattanooga industrial counties—Hamilton County, Tennessee, and Walker County, Georgia — constitute one of the important manufacturing centers in the South. Its nearly 300 widely-diversified manufacturing establishments (each producing goods with a value of $5,000 or more per year) produce approximately 1,500 different items for local and national distribution and for export.

Principal products include food products, iron and steel products, hosiery, textiles, machinery, furniture, chemicals, ceramics, paper products, printing, clothing, leather products, beverages, lumber and wood products and many other items.

In 1939, the 283 manufacturing establishments in the Chattanooga Industrial Counties employed an average of 23,952 wage earners, paid $20,303,648 in wages, purchased materials, supplies, fuel, and electric energy at a cost of $52,487,019, and manufactured products valued at

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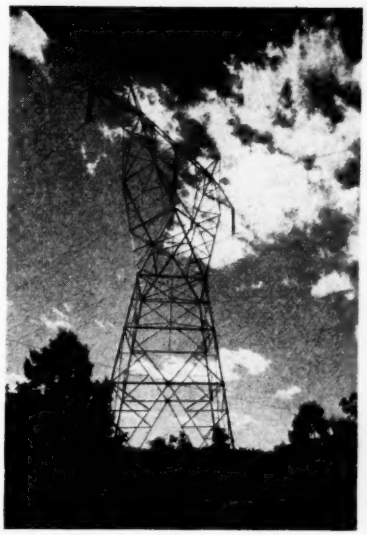

Above—Modern symbol of power looms against this rural Tennessee sky.

Below—Buildings of downtown Chattanooga pictured against distant mountain ranges that gird the area upon every side.

Fiber-Bonding for Improving Textiles

IMPORTANT possibilities for better, stronger and more economical cotton yarns are held out in a new process called fiber-bonding which was exhibited at the annual convention of the American Association of Textile Chemists and Colorists held recently in New York.

The method consists primarily in the impregnation of the yarn with resinous material. This is followed by a process of curing under high tension. These procedures result in a compacting and locking together of the fibers in the yarn so as to enable them to resist slipping action. The break strength of normal twisted yarn is about 20-25 per cent of the actual fiber strength. This is by reason of the fact that fibers first slip and then break. Tests indicate that yarns treated by the new process may be at least doubled in strength.

Machinery of wholly new design, fabricated specifically for the process, originated and developed by Riverside & Dan River Cotton Mills, of Danville, Va., is to be manufactured by Walter Kidde & Co., of Bloomfield, N. J., according to announcements made at the convention. The new equipment will follow closely the design worked out by Dan River Mills in their own machine shops in Danville. It comprises a unit for the treatment of the yarn or roving with the bonding agents, and a second unit for the tensioning and curing of the treated yarn or roving. For certain products these two operations may be combined in one unit, so that treatment, tensioning and curing become one continuous operation.

The new process is the culmination of extensive research and experimentation. During the war, similar resin processes were applied to netting cloths whereby their tendency to slippage was largely eliminated. In July, 1944 Dan River Mills made their first announcement of the process. Since that time, extensive research has been applied, not only as to the chemistry of the process, but in modifying and redesigning the machinery for greater speed, and with a view to improving the quality of the final product. During these experiments the possibility has been developed that the procedure may prove of marked benefit to synthetic fibers such as rayon, as well as to cotton and other plant fibers.

With machinery design now stabilized to the point of permitting commercial manufacture, officials of the Dan River Mills have expressed their assurance that the equipment will equal if not exceed the following performances: (1), An average increase in tensile strength of rovings, yarns or cords of from 40 to 60 per cent from any raw material used; (2), Substantially higher machinery production on the conventional textile machinery preliminary to the bonding process, that is, in picking, carding and drawing; (3), Elimination of conventional processes like spinning, spooling, warping and twisting; (4), Elimination in the bonding treatment of foreign matter, which, during the process, is continuously pressed to the surface and cleaned off as an integral part of the operation.

During the process, the yarn on one spool is dipped in an emulsion of resins and is rewound on a second spool. It is then aged for a short time to permit the applied resins to blend with the natural resins in the cotton. Thereafter, it is cured at high temperature under heavy tension. These operations are parts

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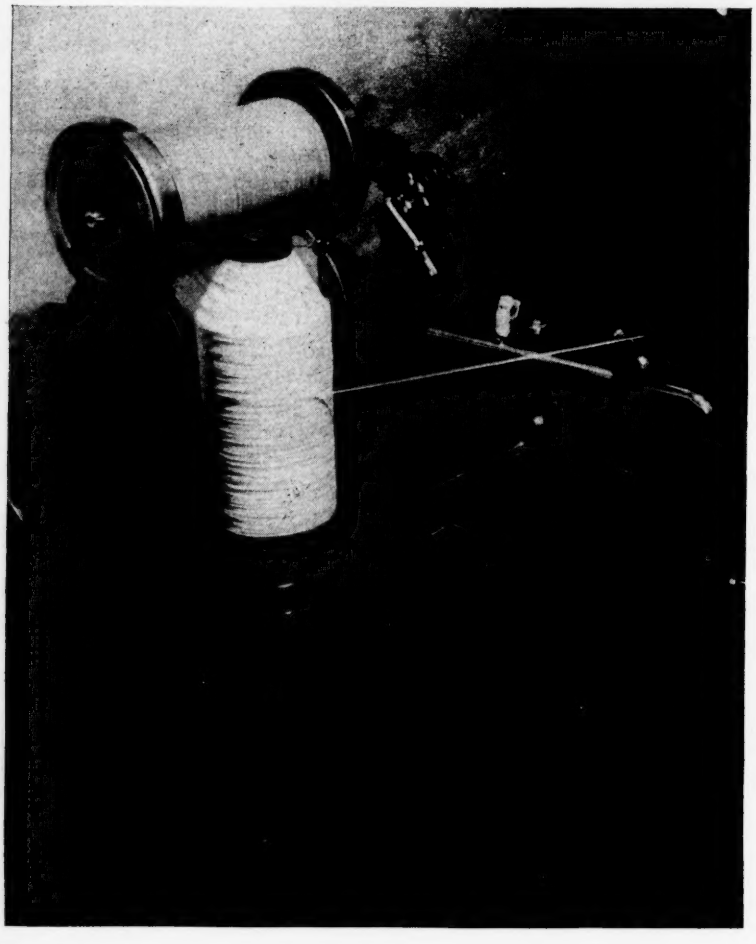
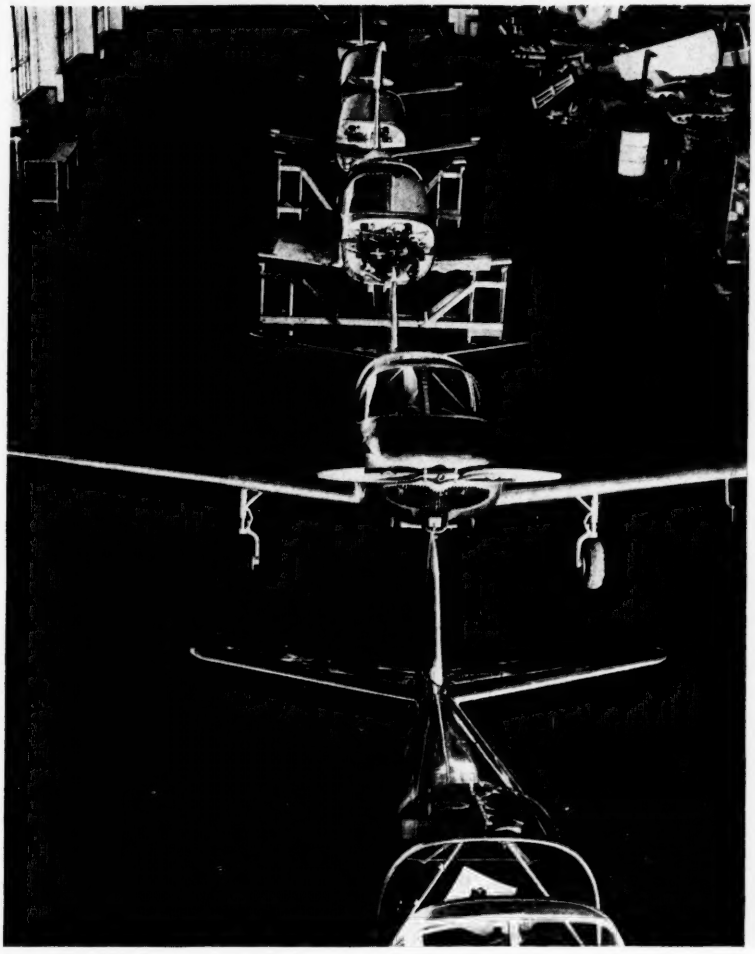


Left—Yarn impregnating machine in which a roving is run through a resin bath and left upon a spool to age.



Swifts being assembled at Fort Worth.

Texas Plane Factory Has $16,000,000 Backlog

A POSTWAR sky full of small, light planes is foreseen in a statement by John Kennedy, president and general manager of the Globe Aircraft Corporation, Fort Worth, Texas, builders of the Globe Swift, an aircraft designed for the private pilot who would have a ship handy for week-end trips to beach or hunting lodge, or who would speed his business visits to distant points.

Globe, according to Mr. Kennedy, has a backlog of orders for Swifts totaling $16,000,000, while a well-organized distributor-dealer organization covering the United States, Canada and portions of Mexico and South America is sending in a steady stream of orders.

Located seven miles north of Fort Worth, the modern Globe plant is now in production of Globe Swifts, all metal, low-wing monoplanes. The Civil Aeronautics Administration has issued an approval type certificate for this, the first post-war designed airplane for personal commercial use.

Although especially designed to lower maintenance cost, special luxury and comfort have been built into the Swift cabin which is of the sliding hatch type, sliding plastic panels disappearing into the fuselage walls. The top plastic panels are tinted for protection against the sun's rays. A cabin width of 42 inches provides plenty of room for two occupants of almost any size. Foam rubber material is used to cushion the seats and one-piece back, assuring prolonged comfort on long trips. All upholstery is of modern leather with an ash tray and map pocket on either side of the cabin, near the instrument panel.

Designed for beauty and simplicity, the instrument panel is located in the center and is removable as a single unit. Additional instruments can be added in especially provided apertures. If no radio is installed, a plate is provided to cover the aperture so that it matches the glove compartment located on the right side of the instrument panel.

Interior color scheme of the cabin is blue with trimmings in cream, while all exposed metal is finished with enamel. Soundproofing material, more than one-half inch thick, add to the comfort of flight and a felt rug covering the entire floor acts as additional insulation against noise, at the same time adding to the cabin's trim appearance.

The Swift is powered by either the four cylinder, 85 HP Continental or the six cylinder, 125 HP Continental engine, both of which are available with either carburetion or fuel injection. Accessories include starter, generator and two fuel pumps. Engines are mounted on rubber shock units.

Cruising speeds are 125 mph with the smaller engine, and 140 mph with the 125 HP unit, with top speeds of 140 mph and 153 mph, respectively. Landing speeds with

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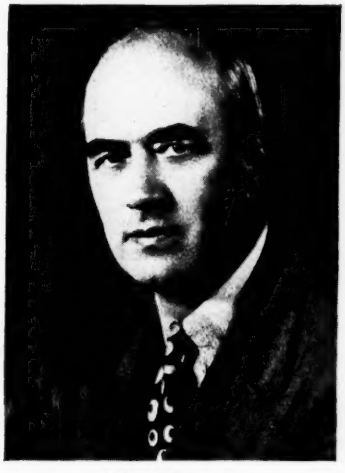


John Kennedy

Southern Regional Research Laboratory, New Orleans, where the cord was developed.

BETTER TIRES FROM COTTON

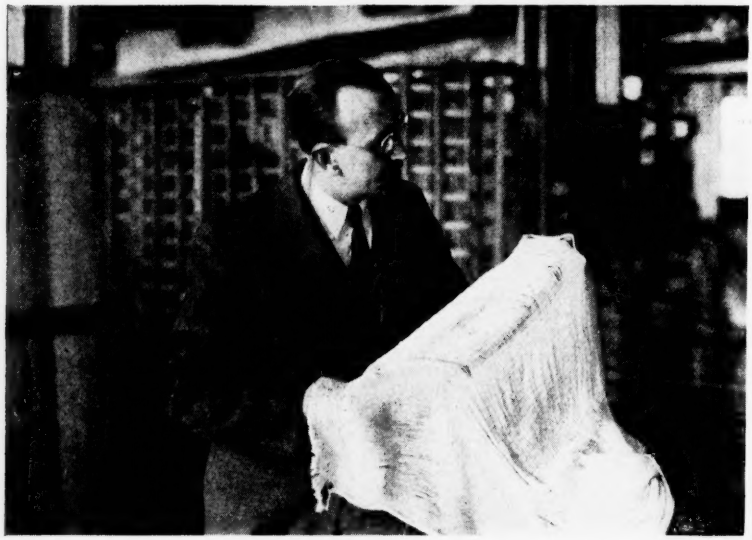
by

Frank L. Teuton

COTTON cord has been used in the manufacture of automobile tires ever since pneumatic tires were first developed. Around 700 thousand bales, or roughly about 10 per cent, of our domestic consumption of cotton, went into the production of tires during the recent pre-war years. This has been our largest single outlet for cotton.

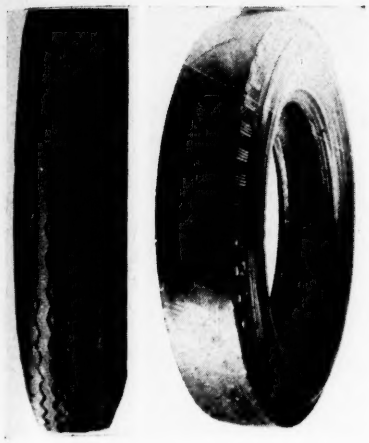
The history of pneumatic tires is largely a history of the dual development of cotton cord fabrics and rubber compounds. First one and then the other was improved until the rubber crisis in 1942 forced the tire industry into large-scale use of synthetic rubber. Introduction of synthetic rubber placed new and heavier demands on fabric performance, and it was necessary to launch research programs to solve these problems. The Bureau of Agricultural and Industrial Chemistry's southern regional research laboratory in New Orleans was one of the research groups which attacked the problem of improving cotton tire cord. This research was started as soon as possible after entry into the war in a cooperative effort to provide our armed forces with the most dependable tires that could be made.

Below—Dr. O. E. May, chief of the Bureau of Agricultural and Industrial Chemistry, United States Department of Agriculture, inspecting tire fabric made from selected varieties of cotton.



The first thing the Southern Regional Laboratory did was to select certain commercially available varieties of cotton from which it was believed better cords could be made. These varieties were selected in cooperation with the Bureau of Plant Industry, Soils, and Agricultural Engineering, on the basis of their physical properties, which spinning and other laboratory tests had demonstrated would produce yarns and cords of superior properties.

To develop a cotton cord that would be satisfactory for synthetic rubber, the laboratory scientists next investigated what is known as low-gauge cotton cord, which they believed would outperform the larger or high-gauge cord that has been used over a long period of years. Cord is used as the framework for the rubber to give the necessary strength to the tire. Strength of a single high-gauge cord is greater than that of a low-gauge cord, but in the use of low-gauge cords the strength of the carcass is maintained by laying the cords closer together. Tires made with the low-gauge cords require less rubber, and on account of the smaller size of the cords permit the production of a tire with slightly thinner walls which means a cooler-running tire. Low-gauge cord fabrics were made from the selected varieties of cotton and delivered to a tire manufacturing company which applied the rub-



Above — Left—New cotton cord tire made from a selected variety of cotton.

Above—Right—Tire after running 68,000 miles with one recap.

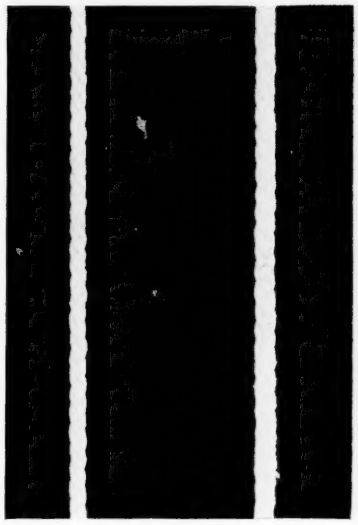
ber to the fabric and turned out the finished tires.

The first of these experimental tires were for trucks, size 7.50-20, and were made of 90 per cent synthetic rubber and 10 per cent natural rubber. The tread was the mud-and-snow military type. As soon as the tires were finished they were turned over to the Army for official testing, which was done on the Ordnance Tire Test Fleet at San Antonio, Texas. This test fleet was set up at San Antonio in 1942 to make official tests that would aid in the development of synthetic rubber tires. It was a cooperative project between the rubber industry and the United States Army. By the middle of 1944 this agency had run tests amounting to more than 14 million truck miles, and had records on tires that had run a grand total of more than 90 million miles. San Antonio was selected for the test fleet headquarters because of ideal year-around climatic conditions and availability of all types of roads and terrain encountered in combat service. This testing service was a major factor in the successful development of synthetic rubber military tires.

The test on the 7.50-20 truck tires provided the first opportunity for obtaining accurate information on the relative performance of cords made from different varieties of cotton for use in synthetic rubber tires for military purposes. The vehicles used in testing the 7.50-20 tires were 2½ ton cargo trucks carrying a 5,000-pound pay load. The test course consisted of 70 per cent paved roads, 15 per cent gravel roads, and 15 per cent cross-country terrain. The tires were systematically rotated every 800 miles to insure uniform wearing.

All the experimental tires in this test gave satisfactory results, but the ones made with the improved cotton cords from the selected varieties of cotton gave much higher mileages and outstandingly better impact resistance to rock ledges and other obstacles than those made from the standard cotton cord used as a control comparison. Tires made from the Stoneville variety of cotton were roughly 20 per cent better than those made with standard high-gauge cord; those made from SXP, 75 per cent better; and those made from Wilds, 132 per cent better.

The results of these tests showed definitely that better cotton tire cords could be made by using varieties of cotton selected specifically for this purpose on the basis of their physical properties. The superiority of cords made from these selected varieties of cotton over standard cotton cords was further



Above—Magnified cotton cords to show differences in size of the smaller low gage cord and the larger high gage cord.

demonstrated by a later test on similar sets of tires run at the Army Ordnance Desert Proving Ground at Camp Seely, California.

As a result of these service tests on military tires, the Laboratory broadened the scope of its tire cord research to seek information on synthetic passenger car and truck tires for highway use. More tires were made up and arrangements made for other tests which were run in the summer and fall of 1944. These tests included both standard and improved cotton cords in 6.00-16 passenger car tires, and both standard and improved cotton cords and rayon in 7.00-20 light truck tires. The improved cord used in these tests was made from Wilds cotton, the variety that gave the best performance in the 1943 Army

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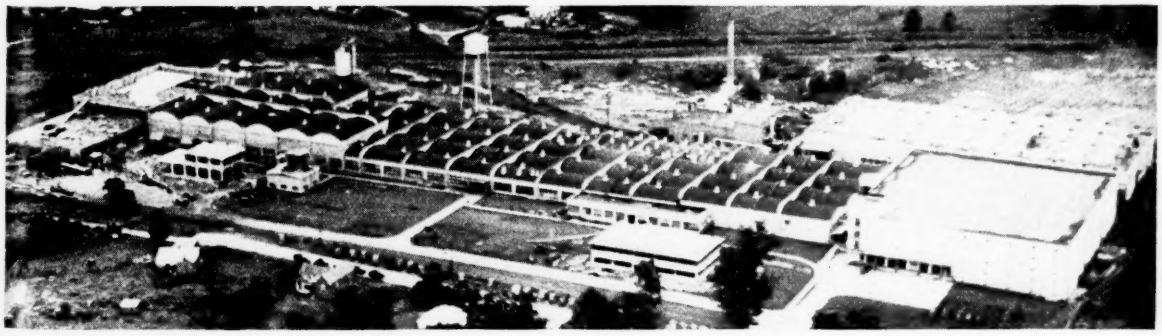
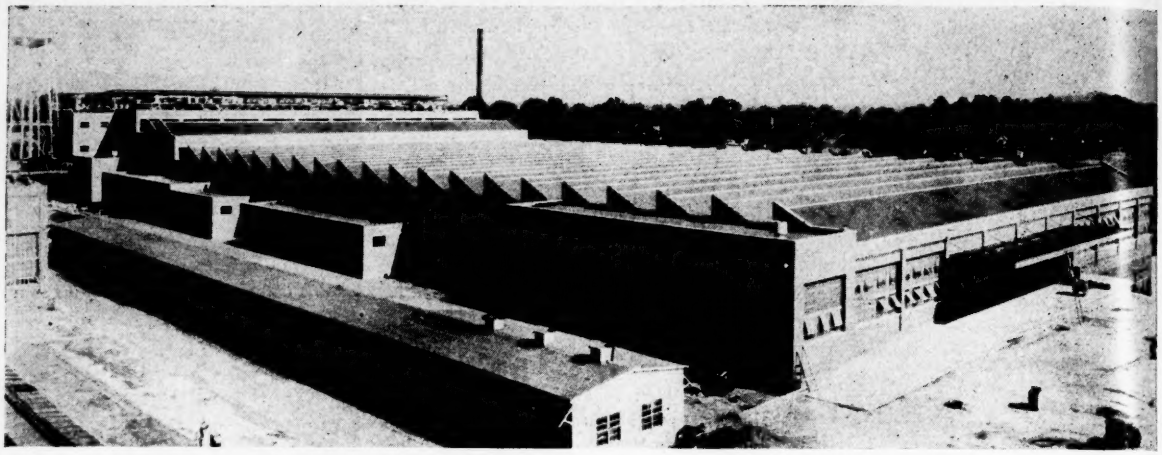
Armstrong Tire & Rubber plant, Natchez, Miss., where the tires were made.





SOUTHERN CONSTRUCTION TOTALS $1,134,416,000 DURING 1945

by Samuel A. Lauver

SOUTH'S CONSTRUCTION BY TYPES

	December, 1945 Contracts Awarded	December, 1945 Contracts to be Awarded	Contracts Awarded Twelve Months 1945	Contracts Awarded Twelve Months 1944
PRIVATE BUILDING				
Assembly (Churches, Theatres, Auditoriums, Fraternal)	$1,666,000	$14,454,000	$17,617,000	$6,217,000
Commercial (Stores, Restaurants, Filling Stations, Garages)	8,390,000	8,452,000	35,057,000	6,361,000
Residential (Apartments, Hotels, Dwellings)	19,372,000	13,983,000	61,416,000	48,882,000
Office	4,229,000	8,523,000	13,063,000	666,000
	$33,657,000	$45,412,000	$127,153,000	$62,126,000
INDUSTRIAL	$25,390,000	$308,837,000	$465,937,000	$192,301,000
PUBLIC BUILDING				
City, County, State, Federal and Hospitals	$11,989,000	$78,451,000	$186,250,000	$214,738,000
Housing	2,342,000	.....	20,985,000	47,972,000
Schools	4,002,000	35,921,000	33,310,000	20,151,000
	$18,333,000	$114,372,000	$240,525,000	$282,861,000
ENGINEERING				
Dams, Drainage, Earthwork, and Airports	$5,581,000	$45,403,000	$112,185,000	$174,274,000
Federal, County, Municipal Electric	4,400,000	10,052,000	28,104,000	2,123,000
Sewers and Waterworks	3,547,000	77,466,000	42,893,000	31,166,000
	$13,528,000	$132,921,000	$183,182,000	$207,563,000
ROADS, STREETS AND BRIDGES	$17,403,000	$15,698,000	$117,619,000	$89,681,000
TOTAL	$108,311,000	$617,240,000	$1,134,416,000	$834,532,000

SOUTH'S CONSTRUCTION BY STATES

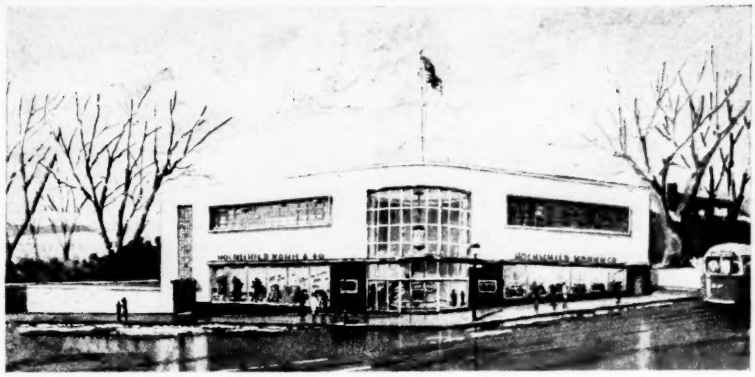
	December, 1945 Contracts Awarded	December, 1945 Contracts to be Awarded	Contracts Awarded Twelve Months 1945	Contracts Awarded Twelve Months 1944
Alabama	$2,103,000	$98,109,000	$100,147,000	$33,778,000
Arkansas	525,000	5,307,000	10,459,000	67,994,000
Dist. of Col.	2,801,000	10,465,000	33,609,000	19,809,000
Florida	15,119,000	13,941,000	83,631,000	82,439,000
Georgia	4,205,000	113,550,000	52,185,000	44,231,000
Kentucky	.....	4,216,000	20,202,000	22,883,000
Louisiana	4,996,000	17,557,000	57,746,000	60,203,000
Maryland	9,053,000	41,621,000	83,499,000	59,285,000
Mississippi	736,000	3,643,000	36,027,000	20,110,000
Missouri	3,895,000	30,447,000	44,218,000	45,036,000
N. Carolina	11,507,000	45,567,000	64,891,000	33,203,000
Oklahoma	3,451,000	19,293,000	34,597,000	23,122,000
S. Carolina	2,664,000	16,585,000	20,348,000	22,028,000
Tennessee	7,013,000	36,907,000	59,308,000	24,875,000
Texas	34,154,000	121,358,000	349,817,000	172,506,000
Virginia	1,052,000	22,157,000	62,957,000	83,070,000
W. Virginia	5,067,000	16,517,000	20,775,000	19,960,000
TOTAL	$108,311,000	$617,240,000	$1,134,416,000	$834,532,000

CONSTRUCTION contracts awarded during 1945 for projects below the Mason and Dixon line totaled $1,134,416,000, with activity during the December totaling $108,311,000 to continue the strength that prevailed during the closing months of the year.

Second highest peacetime construction total on record, the 1945 figure was surpassed in peacetime only by 1940's $1,534,350,000 which marked the beginning of the huge government building program prior to formal entrance of the United States into the war.

The 1945 twelve-month figure was almost thirty-six per cent above that for the preceding year and included $465,937,000 for industrial construction; $240,525,000 for public building; $183,182,000 for engineering construction; $127,153,-

Above—Two large additions have been made to the Gadsden plant of the Goodyear Tire & Rubber Co., thus giving that Alabama tire and tube plant a total of 33 acres of floor space. The main building of a new truck tire and tube unit measures 560 by 250 feet with a 150-foot mezzanine floor section. Another new structure 240 by 200 feet is to house the equipment to manufacture 50,000 pairs of shoe soles and 50,000 pairs of rubber heels daily. The Gadsden plant was built in 1929 and embraces a recently completed tractor tire plant understood to be the world's biggest. Farm tires are the product scheduled for peacetime production. Before the war the Gadsden plant employed 1200 men and women. The peak figure was 3,000 workers and the latest additions will add several hundred more. Rust Engineering Co., Birmingham, is the contractor.



Right—Hochschild, Kohn & Co., Baltimore department store, plans erection of a suburban branch at Belvedere Avenue and York Road, in the Govans section of the Monumental City. To be conveniently located to residents of a large area in the northern part of Baltimore, the project will be of modern design and include parking facilities for patrons. James R. Edmunds is the architect.

000 for private building and $117,619,000 for highway contracts.

Industrial construction, private building and highway work all showed substantial increases in 1945 as compared with the totals for the year before. Percentage increases were: Industrial, 131%; private building, 104%, and highways, 31%.

The rise in southern construction follows the accelerated activity throughout the country and in view of year-end gains indicates the high level of such work forecast for the current year, when the expenditure or new construction is expected to reach $8,300,000,000.

Private work is predicted to make up about three-fourths of all construction in 1946, as contrasted with the two-thirds estimated as the part private building played in the picture last year, according to the Department of Labor. Southern private building and industrial construction together totaled $593,090,000 last year.

December's $108,311,000 was the ninth highest total among those for the months of 1945 during which the highest point was reached in February when southern contracts totaled $130,823,000. The lowest activity was recorded in June, with the total of awards at $50,018,000.

The December figure embraced the year's most intensive highway contract activity. The total for this type of work, while not the largest for the various types, was $17,403,000, a level that has not been exceeded since September, 1942.

Private building in December was a four per cent rise above that for the preceding month, which up to that time was the peak in such activity. The $33,657,000 total for private building, as well as the $32,214,000 for such work in November, reflected both the removal of numerous restrictions and also the impending boom. The December figure was the highest total of record since October, 1939.

Other elements of the December aggregate included $25,390,000 for industrial contracts, $18,333,000 for public building and $13,528,000 for engineering construction. All were lower than the figures for their various classifications in the preceding month.

Industrial contract totals in seven of 1945's months were higher than the December figure. The public building total was below the monthly average for such work in 1945. Engineering construction in December was higher than the 1945 monthly average.

Federal estimates place the total construction expected in the United States this year at $9,950,000,000 of which $8,300,000,000 is forecast as the expenditure for new construction. Of this latter figure, $5,850,000,000 is the estimate for private construction, and $2,450,000,000 for public construction.

Non-farm residential building for the country this year is estimated at $2,600,000,000; Non-residential construction will approximate $1,900,000,000, according to federal estimates, with $1,000,000,000 placed as the industrial construction figure and $550,000,000 for commercial building.

Highway work expected to be placed under contract this year is put at $875,000,000, as compared with the $284,000,000 estimated for 1945. Southern highway construction in the last twelve months totaled $117,619,000. With many millions of dollars available for this year, southern highway departments are expected to forge forward with a correspondingly good program this year.

Preliminary estimates of 1945 construction expenditures, as issued by the Department of Labor, are: $5,873,000,000 for all construction, of which $4,709,000,000 is for new work; $2,723,000,000 for private construction; $1,986,000,000 for public construction and $1,164,000,000 for minor building repairs.

December's southern industrial construction total was eighth on the list of months. Among the active projects in either the plan, contract or construction stage, were the following:

$100,000 auto sales building, Jacksonville, Fla., San Marco Motors.

$100,000 warehouse, Jacksonville, Fla., National Container Corp.

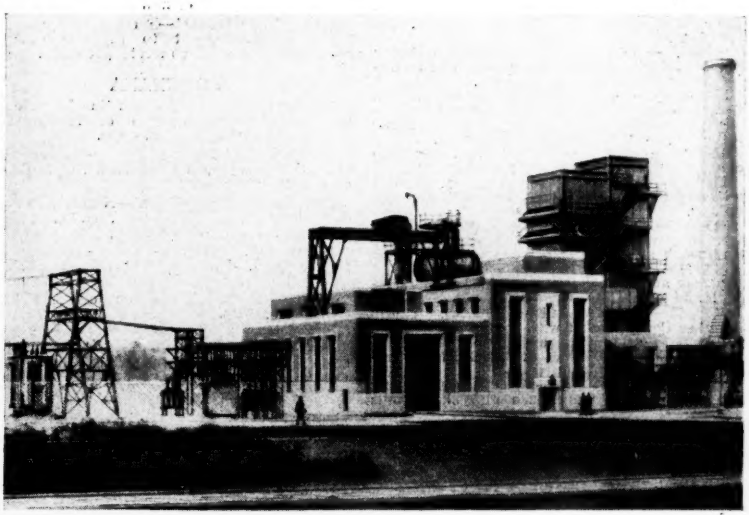
$100,000 plant, Atlanta, Ga., Evans Candy Co.

$100,000 office and laboratory, DeRidder, La., Crosby Chemicals, Inc.

$100,000 garment plant, Houston, Miss., to be occupied by Rice-Stix Manufacturing Co.

$100,000 sales and service plant, North

(Continued on page 58)



Right — New Orleans Public Service has authorized construction of a new 37,500-kilowatt steam plant on the Industrial Canal in the northeastern section of the city and installation of a 210,000-pound-hour steam generator, superseding a lower pressure boiler, and a 25,000-kilowatt turbine-generator at its Market Street steam electric station. The Industrial Canal project will be of the semi-outdoor type involving one steam turbine generator and one steam generator, the latter to be fired by natural gas with oil reserve, and arranged for future use of coal. Ebasco Services Incorporated, of New York, is supplying engineering and construction services.

Southern Industrial Expansion

Directors of Southern Newspaper Publishers Assn., Chattanooga, Tenn., approved erection of mill to turn out 100,000 tons of newsprint annually; estimated cost from $10,000,000 to $15,000,000.

Chesapeake & Ohio Railway Co., C. E. Newton, Pres., Cleveland, Ohio, asking proposals for 1,000 modern, lightweight sleeping cars.

ALABAMA

Alabama Power Co., of Birmingham, plans expenditure of more than $8,000,000 for construction of new generating plants, purchase of new equipment and expansion of present facilities.

BIRMINGHAM — Improvements—St. Louis and San Francisco Rwy. will expend $694,517 for installation of traffic controls, track revision and freight house facilities.

BIRMINGHAM—Laboratory—Southern Research Institute plans new building to cost between $300,000 and $500,000.

BIRMINGHAM—Radio Center—Radio Stations WSGN, WAPI and WBRC plan radio center, including radio towers, buildings and equipment.

ENTERPRISE—Building—Enterprise Manufacturing Co., Inc., has started work on erection of a factory building for manufacture of sportswear: Company capitalized at $300,000.

TROY—Factories—Troy Textiles, Inc., capital $300,000, will build shirt factory; Enterprise Manufacturing Co., Inc., capital $300,000 to build factory for manufacture of sports wear; both plants to be under management of Alabama Textile Products Corp.

ARKANSAS

BENTONVILLE—Plant—Kraft Foods Co., plan construction of new cheese plant with daily capacity of 150,000 lbs. of milk.

LITTLE ROCK—Plant—Minnesota Mining and Manufacturing Co. of St. Paul, Minn., let contract for erection of $1,500,000 plant for manufacturing of roofing granules and other construction materials from Arkansas granite.

DISTRICT OF COLUMBIA

WASHINGTON—Addition — Potomac Electric Power Co. has let contract for addition to generating plant at Bennings, D. C.

FLORIDA

CORAL GABLES — Office, Etc.—Thomas Huston let contract for construction of office and warehouse bldg., cost approximately $20,000.

CORAL GABLES — Plant — Tilton Dry Cleaning Co. has plans in progress for erection of dry cleaning plant; approximate cost $20,000.

FERNANDINA — Expansion —Container Corp. of America, Chicago, let contract for paperboard making facilities to double floor space of present plant.

HIALEAH—Slaughter House—Dade Packing Co. let contract at $125,000 for construction of slaughter house and refrigerating plant.

JACKSONVILLE — Plant — Dillon Food Products Co. will erect $48,000 plant building.

JACKSONVILLE — Warehouse—Phyllis & Roselle let contract at $48,000 for warehouse building.

MIAMI—Addition—Miami Herald let contract for four-story addition to building, cost $295,000.

MIAMI — Candy Factory—De Soto Candy Co. has let contract for construction of manufacturing building; cost $50,000.

MIAMI—Dairy Building—Ryder Properties, Inc., has let contract at approximately $260,000 for construction of modern dairy building to be occupied by Foremost Dairy Co.

MIAMI—Factory — Harry Feinstein will construct furniture factory; cost $15,000.

MIAMI—Office & Factory—Lacy H. Sargent will construct office & factory building; cost $25,000.

MIAMI—Shops, Etc.—Florida Marine Service, Inc., will construct boat storage, office and work shops building; cost $30,000.

MIAMI—Terminal—Ryder Trucking Co. let contract at $236,100 for construction of terminal and office building.

MIAMI—Warehouse—Dade Millworks and Lumber Co. will erect warehouse; cost $20,000.

MIAMI — Warehouse—Florida Wholesale Grocery Co. let contract at $250,000 for warehouse.

MIAMI—Warehouse — Iroquois Company let contract for warehouse and showroom; cost $30,000.

MIAMI—Warehouse — Morgan Ernst Construction Co. will erect warehouse; cost $26,000.

MIAMI—Warehouse, Etc.—L. D. Shell will erect lumber warehouse and store; cost $10,000.

MIAMI—Warehouse and Store—A. Offord and Kelly Co., Inc., let contract for store and warehouse building; cost $30,000.

ORLANDO—Office & Warehouse—McLeod Construction Co. plans to erect new warehouse; approximate cost $30,000.

ORLANDO—Radio Stations—E. T. Wright, Lakeland and Fred. W. Mizer, Coral Gables, seeking FCC permit to operate radio stations here.

ORLANDO — Warehouse — Duncan Auto Supply Co. let contract for warehouse; cost $35,000.

ORLANDO—Warehouse — Harry MacDonald has let contract for construction of warehouse; approximate cost $20,000.

ORLANDO—Warehouse—Wellborn Phillips let contract for erection of warehouse; cost $30,000.

TAMPA — Warehouse — Pittsbugh Plate Glass Co. has let contract at $130,000 for erection of warehouse here.

TARPON SPRINGS — Plant — Victor Chemical Wks., Chicago Heights, Ill., plan new electric elemental phosphorous plant near here; initial expenditure approximately $2,000,000.

GEORGIA

ALBANY—Addition—Albany Laundry Co., let contract for construction of addition, cost approximately $25,000.

ATLANTA—Addition—Chevrolet Motor Co., Detroit, Mich., let contract for 3-story addition to office and plant here.

ATLANTA—Factory Addition — The Auto-Soler Co. let contract at $57,998 for addition to factory building.

ATLANTA—Improvements—Georgia Power Co. has construction plans involving expenditure of over $10,500,000. Will include conversion of street car lines to trackless trolleys, improvement of transmission facilities and 650 miles of new rural electric lines.

ATLANTA—Laundry — Atlanta Terminal Co. let contract at $30,000 for erection of laundry at Terminal Station.

ATLANTA—Office and Plant — Bob's Cola Company plans erection of office and plant building.

ATLANTA — Oxygen Plant — National Cylinder Gas Co. has let contract for construction of oxygen plant.

ATLANTA—Plant — Draper Corp., loom manufacturers, have acquired site for construction of plant, estimated to cost $400,000.

ATLANTA—Plant—Evans Candy Co., has acquired site for erection of building to cost approximately $100,000.

ATLANTA—Warehouse—J. M. Henson Co. let contract at $56,000 for warehouse.

AUGUSTA — Bus Station—National Trailways has let contract for construction of bus station here.

COLUMBUS — Warehouse—Standard Construction Co., let contract, for erection of $50,000 warehouse.

JESUP—Addition—Sea Island Manufacturing Co. has let contract for one-story addition to present plant.

MACON—Bakery—American Bakeries Co., plans expansion; construct new building.

NASHVILLE — Tobacco Warehouse—J. H. Harvey will construct new tobacco warehouse.

SAVANNAH—Plant—Precast Concrete Co., plans modern plant to produce concrete blocks and precast concrete products.

LOUISIANA

ABBEVILLE—Plant—Francis Laporte let contract for construction of frozen food processing plant of latest type.

ALEXANDRIA—Milk Plant—Borden Milk Co., New Jersey, let contract for building, cost $16,000.

BELLE CHASSE—Plant—Niagara Sprayer & Chemical Co., Middleport, N. Y., has let contract for sulphur grinding plant here.

LAKE ST. JOHN — Plant—Hudson Engineer Corp. will construct 100,000 MCF cycling plant, for California Oil Co.

MONROE — Addition—Southern Bell Telephone Co., Atlanta, Ga., has let contract for addition to exchange building; cost $50,000.

NEW ORLEANS—Chemical Plant—F. Uddo and Sons let contract for chemical plant building; cost $125,000.

NEW ORLEANS — Warehouse, Etc. — Falstaff Brewing Corp., let contract for erection bottling warehouse, cost $365,000; for brick office building, cost $40,000 and steel and brick building, cost $100,000.

RUSTON—Locker Plant—Marvin Stevens & Associates plan freezer-locker plant at cost of $50,000.

SHREVEPORT—Plant—Mayo M. Murphy will start work soon on erection of $250,000 furniture factory.

MARYLAND

BALTIMORE—Addition—David Kerr, Inc., plans addition to potato chip plant; cost $10,000.

BALTIMORE — Addition—Independent Ice Company let contract for ice plant addition cost $10,000.

BALTIMORE—Addition—The Rivoc Co. let contract for addition to bakery bldg., cost $30,000.

BALTIMORE—Building—Eastern Iron and Steel Co. will erect building; cost $10,000.

BALTIMORE—Building—Ellicott Machine Co. let contract for building; cost $16,000.

BALTIMORE—Building—General Vending Service Co., has plans in progress for building, cost $45,000.

BALTIMORE—Buildings—American Lumber & Treating Co., let contract, for storage buildings, etc., at cost of $150,000.

BALTIMORE — Expansion—Locke Insulator Corp. has let contract for expansion of its Charles St. plant.

BALTIMORE — Pier—Standard Oil Co. of N. J. has let contract for erection of barge and tanker pier.

BALTIMORE—Radio Station—A. S. Abell Co. is seeking authority of Federal Communications Commission to operate radio station on 850 kilocycles, one kilowatt power and unlimited hours.

BALTIMORE—Railway Equipment—Baltimore & Ohio R. R. Co., has ordered two streamlined, lightweight all-coach trains of 8 cars each.

BALTIMORE — Ship Scrapping—Patapsco Scrap Corp. has been incorporated as subsidiary of Bethlehem Steel Corp. to salvage scrap and other materials obtained in breaking up vessels.

BALTIMORE — Warehouses — Northwest Merchants Terminal, Inc., will construct three warehouses, at cost of $150,000.

BALTIMORE COUNTY — Plant—Liberty Motors & Engineering Co. has plans in progress for manufacturing plant.

QUEENSTOWN — Addition—Green Spring Dairy let contract for addition and alterations to dairy plant.

SALISBURY — Building — William P. Brown, Salisbury, in charge of building being erected corner of Dover and North Division Streets which will be leased to Rubberset Company of Newark, N. J., estimated cost $75,000.

MISSISSIPPI

CLARKSDALE—Factory—Dismuke Tire & Rubber Co. incorporated with $200,000 capital; plan erection of factory for manufacture of tires and tubes.

GULFPORT — Bakery Building—Colonial Baking Co., plans new bakery building.

JACKSON—Building—McGowan Coffee Co. let contract at $55,000 for construction of building.

JACKSON—Factory—W. G. Avery Body Co. will erect sheet metal factory at cost of $22,000.

JACKSON — Plant Building—The Borden Co. has acquired industrial site near here for milk processing plant; estimated to cost $250,000.

JACKSON—Warehouse—Kramer Beverage Co. has let contract for warehouse; estimated cost $20,000.

MAGEE—Factory—City voted $75,000 bond issue for construction of garment manufacturing plant.

NATCHEZ—Gas Plant—The California Co., New Orleans, La., has let contract for gas receiving plant here; estimated cost $15,000,000.

SHELBY — Plant—Shelby Food Lockers, Inc., let contract for erection of new freezer locker plant.

MISSOURI

NORTH KANSAS CITY — Plant—Kraft Foods Co. has started construction of new sales and distribution branch.

ST. LOUIS — Expansion—Monsanto Chemical Corp. has announced an expansion program involving expenditure of $75,000,000 by 1950.

ST. LOUIS—Industrial Sub-division—Roy W. Mespemacher is developing industrial subdivision on 10-acre tract; will install roads, terminal railroad switch, sewers, and grading, now erecting plant; cost $500,000.

ST. LOUIS—Office & Factory—Mesker Bros. let contract at $100,000 for construction of office and factory building.

ST. LOUIS—Plant—J. B. Carr Biscuit Co.,

Wilkes Barre, Pa., let contract for construction of plant and office building here.

ST. LOUIS—Plant & Show Room—St. Louis Boat and Motor Co. contemplates boat building plant and show room; approximate cost $60,000.

ST. LOUIS—Printing Plant—Mendle Printing Co. has plans in progress for printing and lithographing plant; cost approximately $500,000.

NORTH CAROLINA

ASHEBORO—Freight Station—Asheboro & Southern Railway, Southern Railway System subsidiary, has let contract for construction of new and larger freight station.

BURLINGTON — Expansion — Stratford Hosiery Corp., plan expansion program, cost approximately $300,000, including building and equipment.

CHARLOTTE — Addition—Nebel Knitting Co. has let contract for 2-story addition to mill.

CHARLOTTE — Building—Central Motor Lines, Inc., let contract at $45,000 for new building.

CHARLOTTE — Building, Etc.—Dixie Bag Co. let contract for manufacturing building and warehouse.

CHARLOTTE — Hosiery Mill—Belvedere Hosiery Co. has let contract for construction of mill; cost approximately $250,000.

CHARLOTTE — Plant—Novelty Sales Co. has let contract at $40,000 for erection of plant.

CHARLOTTE — Warehouse — Lewis & Holmes Motor Freight Corp. let contract at $2,000 for construction of warehouse.

CHARLOTTE — Yarn Mill — Carolina Processing Co. has let contract for construction of cotton yarn spinning mill.

CONCORD — Expansion — Hugh Grey Hosiery Co. and Concord Knitting Co. plan extensive expansion programs at both plants.

GIBSONVILLE — Hosiery — Hornaday-Summers Hosiery Mills, incorporated by F. D. Hornaday, jr., capital $100,000, to manufacture and sell hosiery.

GREENSBORO—Plant—Industrial Properties, Inc., has let contract at $100,000 for construction of plant and warehouse to be occupied by Port City Hosiery Co.

GREENSBORO — Warehouse—Burlington Mills Co. has let contract at $45,000 for construction of warehouse.

HICKORY—Expansion—Blue Ridge Products Co. making improvements that will quadruple its ice cream production capacity.

HICKORY — Expansion — Hickory Flour Mills will expend $50,000 for improvements adding 50,000-bu. grain storage capacity.

HICKORY—Expansion—Whisnant Hosiery Mills, plan expansion program.

HICKORY — Factory—Gaylord Container Corp., St. Louis, Mo., plans $100,000 paper box factory on 6-acre site near here.

HICKORY — Factory—Hyalyn Porcelain Co., has let contract for construction of factory; cost approximately $200,000. Will manufacture ceramic art wares.

HICKORY — Freight Buildings—Southern Railway plans extension of freight sheds here.

HICKORY — Telephone Building—Hickory Telephone Co. plans $250,000 exchange building and installation of dial equipment.

HILDEBRAN — Expansion — Hildebran Hosiery Mill plans $100,000 expansion program.

JAMESTOWN—Plant—Highland Container Co., let contract for erection of manufacturing plant, work underway; will contain approximately 100,000 sq. ft. and to be ready for occupancy in March; also plans addition to the $600,000 plant.

MOUNT HOLLY — Warehouse—American Yarn & Processing Co. has let contract for construction of warehouse here.

NEWTON—Plant—Warlong Glove Manufacturing Co., Conover, let contract for construction of plant here.

WINSTON-SALEM—Tobacco Warehouse—Forsyth Warehouse Co. has let contract at approximately $100,000 for construction of warehouse.

OKLAHOMA

ARDMORE—Radio Station—John F. Easley filed application with Federal Communications Commission for permission to construct FM broadcasting station.

SOUTH CAROLINA

CAMDEN—Hosiery Plant—James C. Stewart, Ashboro, N. C., will erect new hosiery mill here.

CHARLESTON — Fertilizer Plant—Naco Fertilizer Co. has let contract for dry-mixing plant and insecticide plant; approximate cost $175,000.

CHARLESTON—Lumber — A. W. Allison Lumber Co. chartered with capital of $1,-00,000

CHARLESTON—Plant—Clifford M. Henley plans establishment of milk processing plant; cost $10,000.

CHARLESTON — Plant — Santo Sottile, Charleston, and Geo. Romney, Nashua, N. H., have organized with $150,000 capital to establish furniture manufacturing plant.

CHARLESTON—Plant — The Citadel plans plant for manufacturing own military uniforms; cost $13,000.

CHARLESTON—Plant—Southern Lumber & Millwork Co. plans erecting new lumber plant north of city; cost $30,500.

COLUMBIA—Building—Columbia Tire Co. let contract at $35,000 for construction of building.

GAFFNEY—Cherokee Finishing Company chartered with capital of $50,000.

GEORGETOWN — Plant — Walter A. Schwinge will construct $200,000 wood veneer plant.

LEXINGTON—Textile — Red Bank Mill, Inc., capital $225,000, incorporated by Nathan C. Helman; to manufacture cotton, rayon, etc.

ROCK HILL—Plant — The Celanese Corp. of America plans $10,000,000 plant to be built near here.

TENNESSEE

CHATTANOOGA—Building — Combustion Engineering Co. let contract for construction of factory building.

KNOXVILLE—Factory—Martin Machinery Co. plans construction of factory building to cost approximately $100,000.

MEMPHIS — Building — E. L. Bruce Co. plans administration and assembly building to cost about $50,000.

MEMPHIS—Plant—Fred J. Sexton has $50,-000 permit for industrial plant for Modern Packages, Inc.; will make folding cartons, advertising displays and specialities; total cost of development approximately $500,000.

MEMPHIS—Shops — Greyhound Lines has let contract at $109,299 for construction of bus shop building.

MORRISTOWN — Factory—Belding Hemingway Co. plans factory building; cost $1,500,000.

NASHVILLE — Warehouse—Beasley Furniture Co. let contract at $75,000 for warehouse and store building.

TEXAS

ALICE—Addition—Southwestern Bell Telephone Co. has let contract for addition and remodeling.

AUSTIN—Radio Station — Austin Broadcasting Co., Inc., plans radio station.

BROWNSVILLE—Gasoline Plant — United Gas Corp., Shreveport, La., plans $14,000,000 plant near here to manufacture gasoline from natural gasoline.

CARROLLTON—Building—National Metal Products Co. plans factory building here; cost $100,000.

CORPUS CHRISTI—Addition—South Texas Candy Co. let contract for addition to warehouse.

CORPUS CHRISTI—Laundry—A. C. Skinner has let contract for construction of laundry building; cost approximately $26,000.

DALLAS—Addition—A. H. Belo Corp. has let contract for addition to radio studio.

DALLAS—Addition — The Diamond Alkali Co. will construct manufacturing building addition; cost approximately $28,400.

DALLAS—Addition—Oak Farms will construct addition to milk plant at cost of $11,000.

DALLAS—Addition—Peerless Laundry Co. let contract for addition to laundry.

DALLAS—Addition—Texas Sheet Metal & Mfg. Co. will construct addition to present building; approximate cost $40,000.

DALLAS—Factory Building—Purex Co. has let contract for construction of factory building.

DALLAS—Foundry and Shop — Hugh B. Williams will erect three buildings; cost $28,000.

DALLAS—Laundry—Tiny Tot Service has plans in progress for building; cost $20,000.

DALLAS—Office and Plant — A. H. Belo Corp. has plans in progress for office building and plant; cost $750,000.

DALLAS—Shop—Herman Mayhew will construct machine shop at approximate cost of $14,000.

HOUSTON—Addition—Sheffield Steel Corporation of Texas let contract for addition to steel plant, Houston Ship Channel, cost $2,-500,000.

HOUSTON — Building — D. A. Hollingsworth let contract for laundry building; cost $35,000.

HOUSTON — Machine Shop — Preston Machine Tool Sales Co. plans machine shop building at cost of $50,000.

HOUSTON—Warehouse—Albert Bentch let contract for warehouse; cost $40,000.

HOUSTON—Warehouse—R. L. Hunter has let contract for erection of warehouse; cost approximately $16,000.

HOUSTON — Warehouse — Republic Steel Corporation let contract for steel warehouse; cost $75,000.

HOUSTON—Warehouse—A. I. Schepps let contract for warehouse at cost of approximately $50,000.

HOUSTON — Warehouse — Woestmeyer & Gaffney let contract for construction of warehouse; approximate cost $36,000.

MARSHALL—Plant—Contract has been let at $208,000 for erection of industrial building to house Blue Buckle Overall Co. plant.

NACOGDOCHES — Factory — Sheba Ann Frocks let contract for factory building.

ODESSA—Radio Station—Oil City Broadcasting Co. seeking FCC permission to operate standard broadcast band station.

PAMPA—Creamery—Northwest Dairy has let contract for construction of creamery building; cost approximately $57,000.

PORT ARTHUR—Building—C. W. Loeb let contract at $40,000 for construction of new building.

SAN ANTONIO — Addition — Band Box Laundry has let contract for addition and remodeling of present building.

SAN ANTONIO — Addition—Magnolia Petroleum Co. has let contract for addition to present warehouse; cost approximately $30,-000.

SAN ANTONIO — Bottling Plant — John Cunningham will erect warehouses and garages, repair shop; Royal Crown Cola Bottling Co., Lessees.

SAN ANTONIO—Building—Alamo Potato Chip Co. let contract for construction of factory.

SAN ANTONIO—Factory—E. C. McLane will erect factory building.

SAN ANTONIO — Terminal Bldg. — Sam Shannon plans five- or six-story terminal building.

SAN ANTONIO — Warehouse — Monerief-Lenoir Manufacturing Co. has let contract for construction of warehouse.

SAN BENITO — Addition — Contract has been let for 20,000 K.W. steam-electric turbo generating plant addition to La Palm Power Station; estimated cost $2,500,000.

VICTORIA—City contemplating purchase of Foster army air field for use as manufacturing or industrial center.

VIRGINIA

DICKINSON COUNTY — Rwy. Line — Clinchfield Railroad Co. has let contract for grading, tunnel and concrete work for 14.5-mile branch line.

NEWPORT NEWS—Laboratory—Newport News Shipbuilding & Drydock Co. has let contract for construction of hydraulic research laboratory.

WEST VIRGINIA

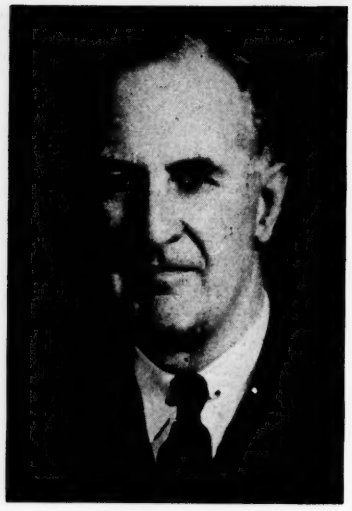
PARKERSBURG — Expansion — The Monongahela Power Co. will spend $500,000 to expand electrical facilities in the Parkersburg area.

PARKERSBURG—Plant—American Cyanamid Co., Calco Chemical Division, Bound Brook, N. J., let contract for construction work at new Willow Island plant to be situated on the Ohio River, 16 miles north of the City of Parkersburg; includes sidings, foundations, roadways and structures; present plans call for the initial manufacturing buildings, warehouse and steam plant, cost approximately $3,000,000; plans for first production and service units well advanced and work in progress at the site; two Ranney collector-type wells having an estimated capacity of 4,000,000 gallons of water per day each are now being put down on the 1,000-acre site by Ranney Methods Water Supplies Co. of Louisville, Ky.

Plane Engines in New Role

The possibility of using surplus airplane engines and propellers to prevent frost damage to truck crops will be investigated under an experimental engineering contract between the War Assets Corporation and the Martin Blad Farms, South Bend, Ind., Wm. B. Cloe, regional director, War Assets Corporation, Richmond, Va., announced today. Under the contract, the War Assets Corporation will make available 20 air cooled aircraft engines and propellers to be used in a project for the control of air temperatures over the farm during seasons of near freezing weather. During these seasons, the cold air settles, resulting in air temperatures near the ground of from six to eight degrees lower than the temperature of the air at 20 feet up. It is planned to send up a blanket of smoke from smudge pots over the crops and use the engines to circulate the air under the smoke blanket. The engines will be placed on mobile mounts, making use of surplus aircraft wheels, so they can be moved where needed.

News from Industry



Eugene Holland

Holland Heads Masonite

Eugene Holland, former president of the Florence Stove Co., has been elected president and a director of the Masonite Corp., it is announced by the Masonite board of directors, Mr. Holland succeeds M. P. McCullough, one of the founders of Masonite Corp., who is retiring, and who has been serving as president pro tem since the death of Ben Alexander in 1944. Mr. Holland became associated with the Florence Stove Co. in 1940, serving as vice president in charge of operations until his election as president of the firm in 1945. He has resigned the latter position, as well as the presidency of Marshall Stove Co., of Louisburg, Tenn.

Agents Announced

Leslie Co., Lyndhurst, N. J., manufacturers of regulators, controllers and whistles announces the appointment of the following agents to handle Industrial sales and services: Gulf Engineering Co., Inc., Savannah, Ga., Southeastern Georgia; Walz and Krenzer, Inc., Rochester, N. Y., Mid-Western New York; Robinson Electric Co., Ltd., Vancouver, B.C., Canada, British Columbia.

Sales Area Extended

Extension of the area of the Washington sales office of The Dow Campbell Company to include Virginia, North and South Carolina, Georgia and Florida has been announced by Leland I. Doan, Vice-President and Director of Sales. The move became effective January 1, Mr. Doan said, and the Washington staff is being augmented to handle the additional activity. The southeastern territory involved has formerly been covered by the New York office.

J. M. Mead C. L. Hardy

Alcoa to Expand Facilities

Aluminum Company of America has announced plans for expansion in foil manufacturing facilities, including installation of equipment in the company's Alcoa, Tenn., plant, the changing of facilities at New Kensington, Pa., and the increasing of facilities at Edgewater, N. J. The improvements are planned to be completed during the latter part of 1946. Alcoa, Tenn., operations will be under the supervision of L. K. Eagle who has been closely associated with Alcoa's development of aluminum foil. According to the announcement, the program will more than double the company's present foil manufacturing capacity.

N&W Foremen Win Awards

The tracks of Norfolk and Western Railway were maintained at a high state of excellence during 1945 according to the reported results of the road's annual track inspection. The average rating for Group "A" track on all divisions was 96.2 out of a possible score of 100, an improvement of .6 over the 1944 score. Improvements also were recorded in Group "B" and Group "C" track.

Winner of the highest rating was Foreman F. P. Combs of Rural Retreat, Va., whose rating was 98.82. Mr. Combs, who placed second in 1944, was among 82 foremen to receive awards. The Norfolk Division headed all divisions, with Radford Division a close runnerup.

Gear Puller Patented

The design of the Klay Puller, in which the pulling and gripping actions are independent of each other, is claimed to develop greater pulling power plus positive grip on the object being pulled. The lock nut principle is designed to securely lock the hooks to the gear or wheel so that they will not slip off, with the grip equally applied on all sides. Klay Pullers are made in two- and three-hook types for pulling anything from a 5/8" gear up to a 40" wheel or hub. Detailed information on the large and complete line of Klay Pullers can be had by writing the manufacturer—The Scott and Ewing Company, Dept. D-5, Findlay, Ohio.

ACS Heads Take Office

Dr. W. Albert Noyes, Jr., chairman of the chemistry department of the University of Rochester, will be president of the American Chemical Society for 1947, it is announced. Dr. Noyes takes office as president-elect while Col. Bradley Dewey, president of the Dewey & Almy Chemical Company, Cambridge, Mass., and former Rubber Director, serves as president, succeeding Dr. Carl Shipp Marvel, professor of organic chemistry at the University of Illinois. The election of Dr. Noyes marks the first time in the Society's 69-year history that the son of a former president has been chosen for the office. Dr. Noyes's father, the late Dr. William Albert Noyes, who was a professor of chemistry in the University of Illinois, headed the Society in 1920.

Bank Executive Chosen

Col. James W. Aston, formerly city manager of Dallas, Texas, has been elected vice president of the Republic National Bank of that city, according to an announcement by the bank's board of directors.

Ryerson Appointments

James M. Mead, manager of the Philadelphia plant of Joseph T. Ryerson & Son, Inc., has been appointed manager of the Ryerson New York Steel-Service Plant at 203 Westside Ave., Jersey City, N. J. He will take the place of Harry W. Treleaven, who is resigning. Mr. Mead began with the Ryerson company in June, 1919, and has spent a large portion of his 26 years in the New York and Newark offices.

C. L. Hardy has been appointed manager of the Philadelphia steel-service plant of Joseph T. Ryerson & Son, Inc. He will succeed James M. Mead, who becomes Manager of the Ryerson New York plant. He joined the Ryerson Co. in 1927 and has served in various sales and metallurgical capacities in the New England territory. He has had many years of experience in the treatment and fabrication of metals and has played an important part in designing and developing many fabricated metal products.

Ore Firm Chief Elected

Allen B. Williams has been elected president of the Aluminum Ore Company to succeed Charles B. Fox has been announced. Mr. Williams began his career nearly 34 years ago, when he entered the apprentice training course at the New Kensington, Pa., Works of Aluminum Company of America. Immediately prior to our entering World War II he was located at Alcoa's headquarters in Pittsburgh where he headed the correlation of the company's vast expansion program. On January 1, 1942, Mr. Williams became vice president of Aluminum Ore Company and first assistant to Mr. Fox, with headquarters in St. Louis.

New Union Pacific Chief

George F. Ashby, in the service of the Union Pacific Railway for 34 years, has been elected president of the company to succeed William M. Jeffers who retired Feb. 1. The announcement, made by F. W. Charske, chairman of the railroad's executive committee, stated that Mr. Jeffers who is 70 years of age retired under the company's retirement rule. Mr. Ashby was assistant to the president before his election to the post of president.

Building Boom Foreseen

Three reasons for a large potential market for building materials are cited by Herbert Abraham, president of The Ruberoid Co., 500 Fifth Ave., New York 18, N. Y. A huge backlog of deferred demand, substantial accumulated savings and the need for new homes for new families appear to head the building industry toward a runaway market, he believes. He also expresses the opinion that nothing could be worse for business than a sudden, inflationary boom; and urges the industry, in its own self-interest, to maintain operation on a reasonable-profit basis, depending upon volume rather than high prices for success.

District Manager Named

Walter P. Maguire has been appointed Baltimore district manager of the United States Steel Supply Company, U. S. Steel subsidiary, according to an announcement. He succeeds James B. McIntyre who retired December 31 after 43 years of service with the company. Mr. Maguire has been with United States Steel Corporation subsidiaries 35 years and has recently been sales manager in the Philadelphia office of the company. He was a pioneer in U. S. Steel and actively participated in the building of the Gary Works of Carnegie Illinois Steel Corporation, the world's largest steel mill.

Three Salesmen Added

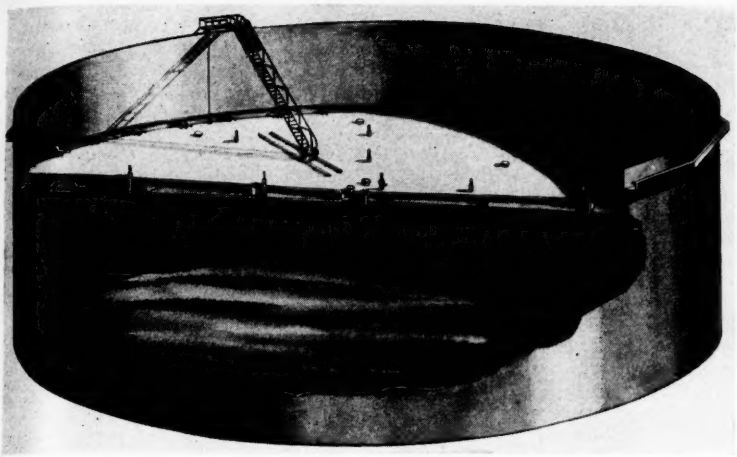
Hendrick Manufacturing Co., Carbondale, Pa., perforated and fabricated metals producers, has made three additions to its sales force, it was announced by Trowbridge A. Warner, sales manager. Clyde M. Watson of Atlanta will cover Georgia and Florida; L. Grayson Yarrington of Baltimore will handle sales in the major portion of Maryland, and the third addition is Westchester Steel Products of White Plains, N. Y.

Commercial Agent Appointed

H. M. Rand is now commercial agent of The Virginian Railway Co., at Richmond, according to an announcement by J. S. Brand, general freight and passenger agent and E. C. Mitchell, traffic manager. Mr. Rand succeeds L. R. Goulder, who has retired after 13 years of active service with the company.

Navy Man Returns

Lt. Robert Maynard has returned to his position as export manager for The Osgood Co., and The General Excavator Co., Marion, O. He will handle all export sales and advertising of Osgood and General Excavator shovels, cranes, draglines, backbones and similar equipment, according to the announcement issued by the president of the company, M. C. McNeill. Mr. Maynard was discharged from the navy recently, after serving three years during which he saw action in the principal Pacific theaters of war.



Improved Horton Floating Roof

Aluminum-Tar Coating Offered

An aluminum coating designed to beautify and protect metal surfaces with only one coat is announced by Reilly Tar & Chemical Corp., Indianapolis, large manufacturer of coal tar products. The new coating combines the attractive appearance of aluminum with the protective properties of coal tar and can be applied either by brush or spray. While designed primarily for metals, it is said that it may also be used on cement, tile, wood and brick. Its applications include storage tanks, metal buildings, towers, stacks, radiators, pipes, truck bodies, tractors, bridges and other farm and roadway equipment. Description in circular form can be had by writing the company, Merchants Bank Building, Indianapolis 4, Ind.

Braniff to Expand Fleet

Purchase by Braniff Airways, Inc., of a fleet of 18 new Martin 202, forty-passenger luxury liners at a cost, including maintenance equipment, of over four million dollars, has been announced by T. E. Braniff, president of the company. Deliveries are to begin early in 1947, the planes to go into service immediately as delivered. They will supplement Braniff's current fleet of 16 DC-3s and five recently purchased 4-engined C-54s to be delivered in 60 days from the Martin Baltimore plant. In commenting on the purchase, Mr. Braniff gave high praise to Martin quality and performance.

Army Major Reconverts

J. Huston McClane has been appointed manager of the Atlanta office of the Paper Makers Chemical Department of Hercules Powder Co., of Wilmington, Del., it has been announced by M. M. Bixby, department director of sales. Mr. McClane, who returns to civilian status after serving as a major in the Army overseas, will supervise sales of alum and other PMC chemicals in the southeastern states. While in the Army, he served in England, North Africa and Italy as purchasing and contracting officer for procurement of engineering material. He was awarded the Bronze Star and three battle stars.

New Type Truck Designed

A twin-engine truck, designed for fast, long-distance hauling, has been developed by the truck division of The Eisenhauer Manufacturing Co., Van Wert, Ohio. The vehicle, which has a payload capacity of about 20 tons, includes in its structure a special arrangement of wheels, using 16 Goodyear Hi Miler heavy-duty tires; four front steering wheels in tandem, rather than dual arrangement; three rear axles, including two driving axles with a dead axle between, and two standard make 93-horsepower motors mounted in line. Overall length is 35 feet with a bed of 25 feet. The frame is rigid but has flexible-type suspension. The motors can be used singly or together and power selection is enabled by means of a differential type synchronizer. Standard ½-ton truck parts are used throughout with the exception of frame and suspension.

Horton Floating Roof

An improved Horton floating roof, of double-deck construction has been developed by the Chicago Bridge & Iron Co., Chicago, Ill., for use on flat-bottom tanks storing volatile liquids.

Double-deck construction insulates the liquid and eliminates practically all boiling, thus extending the range of products previously stored in floating roof tanks.

Bottom of the deck is sloped up toward the center and the roof is designed to vent all air from beneath the deck. The top of the deck is smooth and slopes toward the drain located at the center.

The Horton seal closes the space between the tank shell and the deck. A sealing ring forms a long sliding contact with the tank shell and is joined to the deck by a continuous gastight curtain.

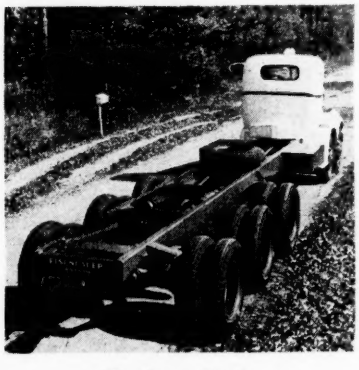
Dougherty Joins Textile Institute

James E. Dougherty, recently honorably discharged from the Army of the United States, has joined the staff of the Institute of Textile Technology, University of Virginia, as a laboratory technician.

A graduate of the Philadelphia Textile Institute, Mr. Dougherty has had considerable experience in textile designing fields with the Caledonia Woolen Mills, Clifton Heights, Pa., and Bibb Manufacturing Co., Macon, Ga.

Appointed Sales Manager

Appointment of L. R. Knapp as Washington sales manager for special accounts, Carnegie-Illinois Steel Corporation, has been announced by Thomas J. Hilliard, vice president in charge of sales. He succeeds Harry F. Knapp, retired December 1, after 44 years' service with the corporation. Mr. Knapp has been with the U. S. Steel subsidiary 12 years, and prior to coming with the corporation had varied experience in export and sales engineering fields.



Eisenhauer Truck

Bethlehem Steel Expansion Placed at $134,000,000— Directors Declare Dividend

New construction including a 66-inch hot strip mill and a battery of 70 coke ovens is part of the expansion program now going forward at the Sparrows Point, Md. plant of Bethlehem Steel Corp., which together with projects at other of the Corporation's plants will involve expenditures estimated to $134,000,000.

The work is being done under the long range Bethlehem policy calling for diversification of the output at its tidewater plant. Included is the construction of four new 25,000-ton capacity ore carriers at the shipyard division adjacent to the Sparrows Point steel plant.

The ore fleet will operate between Venezuela and the Chesapeake Bay plant, where a new cold strip mill is now being built at a cost estimated at $15,000,000. The 17-knot speed of the new ships will lower the sea-time of the ore shipments as well as provide greater cargo carrying capacity.

Announcement of the increased construction authorizations was made at the regular quarterly meeting by Eugene G. Grace, chairman of the board, with the revelation that the Corporations net profit last year was $34,947,116, or an amount equal to $9.93 a share on the common stock, as compared with the $9.93 per share earned in 1944.

Bethlehem's backlog at the end of 1945 totaled $468,000,000. At the same time the year before, the backlog was $1,240,000,000. The current backlog included $213,000,000 in ship orders and $255,000,000 for steel orders, the latter being equivalent to from 4,000,000 to 4,250,000 net tons of steel or about four months' capacity production.

Bell Tries Out Radiotelephone

American Telephone & Telegraph Co., 195 Broadway, New York 7, has announced that its Bell System is trying out mobile radiotelephone service between Chicago and St. Louis, New York, Albany and Buffalo and New York and Boston. When established the service will make it possible for suitably equipped vehicles on highways or boats on adjacent waterways to make and receive calls to or from any telephone connected to lines of the Bell System. Transmitting and receiving stations will be located along the routes. Applications for the service have already been filed with FCC but the service will be possible only after the installation of stations which will require several months.

Florida Starch Operation Starts

(*Continued from page* 39)

doubled to provide an additional 2,500,000 pounds of steam and 85,000 kilowatt-hours of electricity daily.

All the buildings of the starch-house are of modern design, built of reinforced concrete framing and feature the use of glass brick walls and glazed tile.

The starch and its derivatives are used in the production of almost every item of commerce, from cream puffs to dynamite. Some of the primary uses are in the sizing of textiles and paper, laundering, adhesives, printing, and food products. The pure starch is a perfectly odorless and tasteless white powder. Since the beginning of the war, starch has been listed as a critical commodity and, with the war's end, the starch shortage is expected to continue for an indefinite period.

Value of the starch and pulp produced will amount to approximately $5,000,000 per year. The former will supplant special starches closed to American importers by the war and its aftermaths.

More than 12,000 acres in the Everglades will be devoted to raising sweet potatoes as raw material for the starch-house. Some of the acreage is supplied by the sugar company and some by neighboring farmers, who will provide the potatoes under contract. Forty freight cars of potatoes per day are required for the starch-house which will produce ten carloads of finished material every 24 hours.

The potatoes are of a special variety especially developed and tested by the company after nearly a decade of research. They grow as large as a man's head and contain a much higher starch content than the ordinary table varieties.

Potato yields are between 500 and 700 bushels per acre. In experimental tests the yield has been considerably higher than this under perfect conditions. With freeze-free ground the year around, the starch-house has an advantage over less favored areas because it can store its potatoes in the ground without damage. The potatoes are planted in early spring and also during the summer.

From the rich loam fields of the Everglades, the starch roots are transported from loading hoists, at plantation sidings, to the starch-house in standard-gauge railroad cars, which pass over a track scale for weighing before unloading. The roots are delivered from nearby plantations direct to starch-house in field wagons, and provision is made for truck delivery of purchased roots.

After being weighed, the railroad car moves to an electrically operated tilting table, where it is turned partly on its side and the contents dumped into a soaking pit. Here the roots remain for 30 minutes to loosen soil and other foreign matter, and are then conveyed to tumbling washers, thence to brush washers, which help maintain high standards of cleanliness and purity throughout the extracting operation. After thorough washings, the roots are elevated to a storage bin in the "wet" house building.

They are then passed through slicing and grinding machines which rupture the fibrous cells holding the starch. The starch containing pulp moves to "classifiers," low-speed centrifugals, for removal of the natural root waters, and then on to the primary screens where approximately three-quarters of the recoverable starch passes through the screens.

The starch "milk" from primary screens is now conveyed to high speed centrifugals for thickening and purifying, after which it is bleached. The starch milk is then modified, if desired, and passes to the filter station for washing, to centrifugals for dewatering and then to huge rotary dryers, which reduce moisture to approximately 10 per cent.

Pulverizers and separators in another building prepare the starch for passage through 200 mesh or finer screens, and it is then ready for the storage bins. Predetermined proportions of different starches may be conveyed to blenders for production of "specification products" and then to the storage bins.

From the storage bins the starch is conveyed to scale hoppers, then to automatic weighing devices and bagged. The bags are closed and delivered to either a railroad car or truck, or placed in the warehouse for later shipment.

The by-product solids of the operation are dewatered and dried and also moved to the storage bins and scale house for bagging. This starch pulp makes an excellent stock-feed.

The methods employed in the starch-house were developed by the corporation in cooperation with the research laboratories and scientists of the United States Department of Agriculture.

Mr. Bitting pointed out that close attention is being paid to the production and use of by-products from the starch operations. Pulp stock-feed production will amount to approximately 30,000,000 pounds annually, and the sweet potato vines, running from 20 to 40 tons to the acre, form another source of livestock feed, having high nutritive value as a forage.

Even the water is not thrown away. The "fruit waters" and other watery wastes produced during extracting operations are passed on to the waste disposal system, where in "digester tanks," decomposition sets in and produces almost a million cubic feet of gas per day. This gas is piped to the power plant where, as fuel, it operates the boilers approximately one-third of the time.

The solids, settling out of both the wash waters and the fruit waters, form a high quality fertilizer and are pumped to the sandy-type fields for the enrichment of the soil.

The new steam generating facilities will not only make it possible to produce an additional 85,000 KWH daily but, after the steam has been used to produce electricity, it will be further utilized in the extraction and drying of the starch, thus doing double duty.

The waste disposal plant is located southwest of the sugar-house, and assures against pollution of the waters, soil and life of the area. The plant consists of a series of fermentators, clarifiers, flocculator, aerator and chlorinator. The purified water, which is returned from the plant to Lake Okeechobee, compares favorably with the domestic water supply of many urban areas, and in quantity and quality exceeds the water which was drawn from the lake for starch-house purposes.

To assure the finest quality of water for use in various processes, a modern water-treatment plant has been erected opposite the starch-house. A 145-foot water tower, 50 feet in diameter, having a 250,000 gallon capacity, furnishes water supply and fire protection for the entire plant area. Adjoining the tower is the water treatment plant, which provides additional reservoir capacity of 500,000 gallons.

The water is obtained from a pumping station located five miles out in Lake Okeechobee. The water is carried seven miles through a 24-inch pipe line from the Lake to the water treatment plant. Wash water is withdrawn for use without treatment. The balance of the water passes through two or three treatment units.

The new starch-house will be one of the few in the United States producing starch from sweet potatoes, since almost all of American starch production is from corn. The starch-house already has been acclaimed by experts in root-starch processing as the most modern and efficient in the world.

Among the manufacturers who furnished equipment for the new starch plant are:

Allis-Chalmers Manufacturing Co., Milwaukee, Wisc.
Babcock & Wilcox Co., New York.
Baker Perkins, Inc., New York.
Bird Machine Co., South Walpole, Mass.
Chain Belt Co., Milwaukee, Wisc.
Davenport Machine & Foundry Co., Davenport, Iowa.
The Dorr Co., New York.
Food Machinery Corp., Dunedin, Fla.
Fuller Co., Catasauqua, Pa.
General Electric Supply Corp.
Hershey Manufacturing Co., South Boston, Mass.
Infilco, Inc., Chicago, Ill.
Merrick Scale Manufacturing Co., Passaic, N. J.
Merco Starch Centrifugal Corp., San Francisco, Calif.
Ogden Iron Works, Ogden, Utah.
Oliver United Filters, Inc., New York.
Pangborn Corp., Hagerstown, Md.
Raymond Pulverizer Division, Combustion Engineering Co., Inc., Chicago, Ill.
Robins Conveyors, Inc., Passaic, N. J.
E. H. Sheldon & Co., Muskegon, Mich.
Sprout-Waldron and Co., Inc., Muncy, Pa.
Stephens Adamson Manufacturing Co., Aurora, Ill.
St. Regis Paper Co. (Engineering and Machine Division), New York.
Union Special Machine Co., Chicago, Ill.
Westinghouse Electric and Manufacturing Co.
C. Frederick Wolfe, Inc., New York.

the HORTONSPHERE

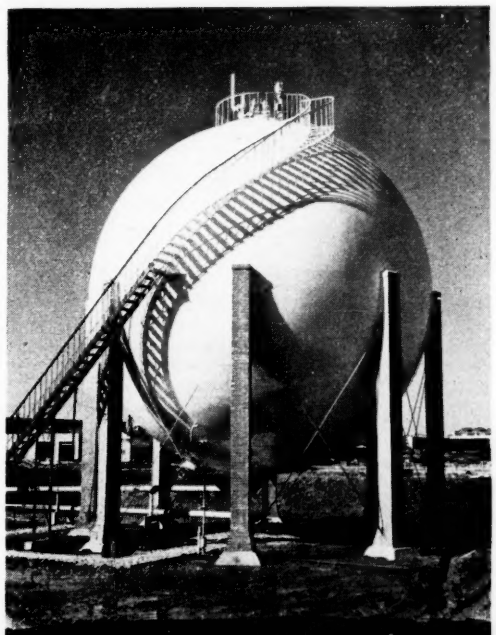
... a spherical storage tank for storing a wide variety of volatile liquids and gases such as butane, butadiene, isobutane, anhydrous ammonia, helium, hydrogen gas, natural gas and manufactured gas

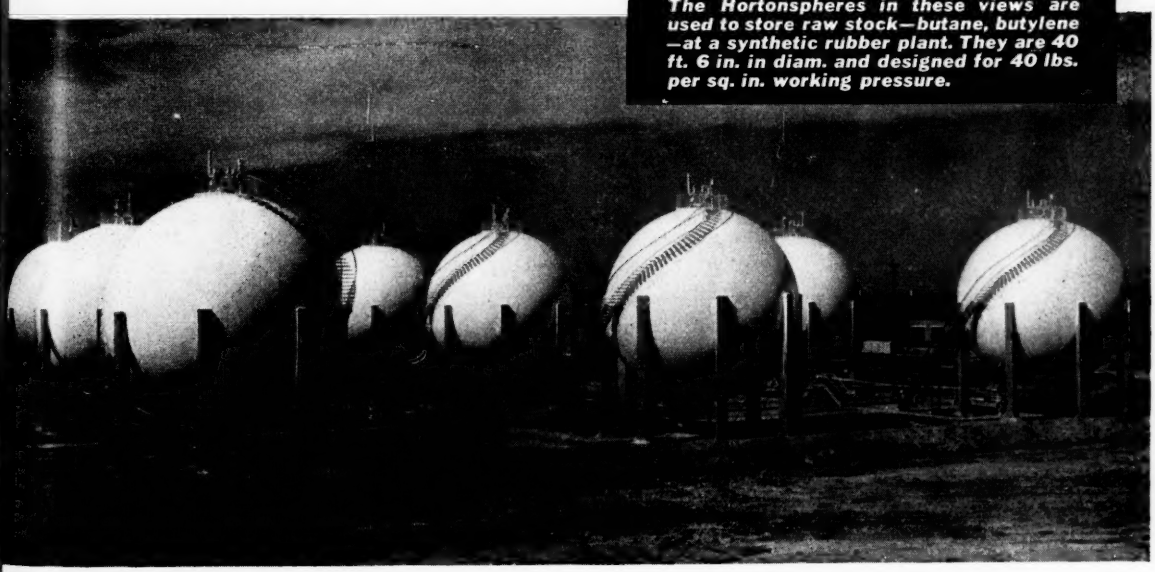
Hortonspheres reduce or entirely eliminate evaporation losses from *liquids*, depending upon their volatility. Instead of permitting vapor to escape through the vents when temperatures rise or when additional material is being pumped into the sphere, pressure builds up inside. There is no evaporation loss as long as the vents do not open.

Hortonspheres also provide economical storage for *gases*. They do not have water seals and thus do not require heating in cold climates. Furthermore, the absence of water seals eliminates contamination of the contents that occurs when some gases come in contact with water.

Hortonspheres are plain storage tanks. They have no working parts and do not require constant attention. Their maintenance costs are low. They are built for pressures as high as 40 lbs. per sq. in. up to 65 ft. in diam., 75 lbs. per sq. in. up to 51 ft. in diam., 100 lbs. up to 45 ft. in diam., 150 lbs. up to 30 ft. in diam., 200 lbs. up to 22-1/2 ft. in diam., 250 lbs. up to 18 ft. in diam., 300 lbs. up to 15 ft. in diam.

When you have a pressure storage problem, investigate the Hortonsphere. Write our nearest office specifying type of product, capacity in gallons or cubic feet, as well as maximum and minimum working pressures.





The Hortonspheres in these views are used to store raw stock—butane, butylene—at a synthetic rubber plant. They are 40 ft. 6 in. in diam. and designed for 40 lbs. per sq. in. working pressure.

CHICAGO BRIDGE & IRON COMPANY

Atlanta 3.....2145 Healey Building
Birmingham 1.....1530 North Fiftieth Street
Houston 1.....5614 Clinton Drive
Tulsa 3 .....1611 Hunt Building
New York 6.....3313—165 Broadway Building
Cleveland 16 .....2216 Guildhall Building

Chicago 4 .....2106 McCormick Building
San Francisco 11...1240-22 Battery St. Building
Philadelphia 3...1619—1700 Walnut St. Building
Los Angeles 14.....1417 Wm. Fox Building
Washington 4 .....703 Atlantic Building
Detroit 26 .....1510 Lafayette Building

Plants in BIRMINGHAM, CHICAGO and GREENVILLE, PENNSYLVANIA

$1,134,416,000 for South's Contracts during 1945

(*Continued from page* 51)

Kansas City, Mo., Allen Chevrolet Co.

$100,000 hosiery mill, Greensboro, N. C., Industrial Properties.

$100,000 addition, Burlington, N. C., Long Finishing Mill.

$100,000 printing plant addition, Nashville, Tenn., Marshall & Bruce Co.

$100,000 factory, Jackson, Tenn., Jackson Building Corp.

$100,000 plant, Fort Worth, Texas, Milwaukee Bottling Co.

$125,000 chemical plant, New Orleans, La., F. Uddo & Sons.

$125,000 terminal, Amarillo, Texas, Southwestern Greyhound Lines.

$140,000 freezer plant, grain storage enlargement, Durham, N. C., Farmers Mutual Exchange.

$160,000 factory, Marshall, Texas, Marshall Industries, Inc.

$165,000 warehouse, Baton Rouge, La., Cash Grocery and Sales Co.

$200,000 addition, Charlotte, N. C., Larkwood Hosiery Co.

$200,000 plant, Georgetown, S. C., Walter A. Schwinge.

$225,000 plant, Louisville, Miss., to be occupied by National Automotive Fibres, Inc.

$250,000 plant, Helena, Ark., Heelna Cotton Oil Co.

$250,000 plant addition, Ocala, Fla., Florida Power Corp.

$250,000 building, Columbus, Ga., Muscogee Manufacturing Co.

$250,000 furniture factory, Shreveport, La., M. M. Murphy.

$230,000 bottle plant, Baltimore, Md., Maryland Glass Corp.

$250,000 hosiery mill, Charlotte, N. C., Belvedere Hosiery Co.

$250,000 expansion, Kernersville, N. C., Southern Silk Mills.

$250,000 improvements, Spartanburg, S. C., Beaumont Manufacturing Co.

$250,000 plant, Houston, Texas, Lloyd A. Fry Roofing Co.

$255,000 warehouse and office, Atlanta, Ga., Pittsburgh Plate Glass Co.

$260,000 dairy, Miami, Fla., Ryder Properties, Inc.

$295,000 publishing plant addition, Miami, Fla., Miami Herald.

$300,000 publishing plant expansion, Columbus, Ga., Ledger-Enquirer.

$300,000 expansion, Burlington, N. C., Stratford Hosiery Corp.

$300,000 box plant, Memphis, Tenn., Valley Fibre Box Co.

$300,000 plastics plant, Memphis, Tenn., Cleveland Container Co.

$400,000 plant, Atlanta, Ga., Draper Corp.

$505,000 project, New Orleans, La., Falstaff Brewing Corp.

$500,000 plant, St. Louis, Mo., American Fixture and Manufacturing Co.

$600,000 box plant, Jamestown, N. C., Highland Container Co.

$600,000 glass plant, Laurens, S. C., Laurens Glass Works.

$500,000 plant, Memphis, Tenn., Modern Packages, Inc.

$500,000 furniture plant, Fort Worth, Texas, A. Brandt & Co.

$500,000 packing plant, Longview, Texas, J. D. Shaw.

$700,000 pipeline, Arkansas, Arkansas-Louisiana Gas Co.

$750,000 parts building, Houston, Texas, Ford Motor Co.

$1,000,000 publishing plant expansion, Charlotte, N. C., Charlotte Observer.

$1,000,000 expansion, Marshall Field & Co., Spray, N. C.

$1,000,000 milk plant and office, Houston, Texas, Carnation Milk Co.

$2,000,000 plant, Atlanta, Ga., Crown Cork & Seal Co.

$2,000,000 natural gasoline and r

(*Continued on page* 60)

Better Tires From Cotton

(*Continued from page* 49)

tests. In these tests, which were made by the Government Tire Test Fleet of the War Production Board at San Antonio, the gauge of the improved cotton cord was made the same as that of the standard cord in order to eliminate all variables except the variety of cotton.

The results of these tests on tires for highway service showed that rayon and the improved cotton cord performed much better in the light truck tires than the standard cotton cord. In the 7.00-20 rear wheel service tests, Wilds cotton tires gave three times the mileage of standard cord tires, and the rayon tires, 16 per cent more than the Wilds. The slightly better performance of the rayon over the improved cotton cord was attributed mainly to a difference in the type of cord construction, since no fabric failures occurred in any of the tires made with the improved cotton cord. The report shows also that the rate of tread wear was less on the cotton than on the rayon tires.

The vehicles used in the passenger car tests were 1942, 4-door type automobiles. The cars were run at 60 miles an hour on paved highways out of San Antonio. The reports show that both the standard and improved cotton cords gave entirely satisfactory performance in these tests. The carcasses of both sets of tires lasted longer than the rubber. With one recapping, tires made from these cords ran a total of nearly 70,000 miles, and with the exception of one tire which had a separation under the breaker at 55,000 miles, all the carcasses were still in good condition. With another recapping, the tires could have been run further, demonstrating that the standard, as well as the improved cotton cord, is entirely adequate for high-speed passenger car driving.

The overall results of these tests were gratifying in that they showed conclusively that better tires can be made from cotton. They also supplied much valuable information regarding the influence of such important factors as cord gauge and cord construction on synthetic rubber tire performance. This information is being used in guiding further research on the development of improved types of cotton tire cord for use in larger size truck and bus tires.

The results obtained in the research to develop improved cotton tire cords should be of particular interest to producers and processors of cotton because they show the importance of selecting cotton with properties best adapted for specific uses. This means that the time has come for us to give more thought to the selection of varieties of cotton which possess the characteristics needed for the things we want to make. Some thought is already being given to this, particularly by those engaged in cotton breeding research, but it should be expanded even further with more emphasis than at present in the processing and utilization fields. We must not throw cotton out the window just because it may not be the ideal fiber for some particular purpose. No single fiber is good for everything. Cotton enjoys a wider use than any other one fiber, but like all other fibers it has limitations. Many of these apparent limitations, however, can be overcome by research to modify and better adapt cotton to meet specific use requirements.

JOHN SCOTT MEDAL
CITY OF PHILADELPHIA

FREDERIC IVES MEDAL
OPTICAL SOCIETY OF AMERICA

MEDAL OF THE
ROYAL PHOTOGRAPHIC SOCIETY, GREAT BRITAIN

THOMAS ALVA EDISON MEDAL
AMERICAN INSTITUTE OF
ELECTRICAL ENGINEERS

EDWARD LONGSTRETH MEDAL
FRANKLIN INSTITUTE

PROGRESS MEDAL
SOCIETY OF MOTION PICTURE ENGINEERS

FARADAY MEDAL
INSTITUTE OF ELECTRICAL ENGINEERS

WILLARD GIBBS MEDAL
CHICAGO SECTION OF
AMERICAN CHEMICAL SOCIETY

ELLIOTT CRESSON MEDAL
FRANKLIN INSTITUTE

HENRY MARION HOWE MEDAL
AMERICAN SOCIETY FOR METALS

CHARLES B. DUDLEY MEDAL
AMERICAN SOCIETY FOR TESTING MATERIALS

FRANKLIN GOLD MEDAL
FRANKLIN INSTITUTE

DAVID EDWARD HUGHES MEDAL
ROYAL SOCIETY, LONDON

GOLD MEDAL
AMERICAN INSTITUTE OF CITY OF NEW YORK

JOHN PRICE WETHERILL MEDAL
FRANKLIN INSTITUTE

JOHN FRITZ MEDAL
FOUR NATIONAL
SCIENTIFIC SOCIETIES

Medals AND Milestones

More than 50 awards from learned and professional societies have been presented to staff members of Bell Telephone Laboratories for their scientific discoveries and inventions.

Awards include the Nobel Prize in Physics, the Hughes Medal of the Royal Society, London, the Willard Gibbs Medal, the Franklin Gold Medal, and the John Scott Medal.

Bell Laboratories scientists and their associates explore every scientific field which offers hope of bettering communications. That is why Bell System research is so important to the future of sound and television broadcasting, as well as to the ever-improving standards of telephone service.

BELL TELEPHONE SYSTEM

$1,134,416,000 for South's Contracts during 1945

(*Continued from page 58*)

pressuring plant, Archer County, Texas, Warren Petroleum Co.

$3,000,000 pipeline, Texas, Humble Pipe Line Co.

$3,000,000 plant, Parkersburg, W. Va., American Cyanamid Co.

$3,500,000 expansion, Florida, Victor Chemical Works.

$4,000,000 plant, Houston, Texas, National Biscuit Co.

$6,000,000 container plant, Baltimore, Md., American Can Co.

$8,933,000 pulp and paper mill, Port Wentworth, Ga., Robert Gair Co.

$10,000,000 pulp and paper plant, Macon, Ga., Mead Corp.

$12,000,000 paperboard and box plant, Orangeburg, S. C., Gair-Santee Corp.

Erection of Another Newsprint Mill in the South Assured

Plans of Southern Newspaper Publishers Association for erection of another newsprint mill in the South took definite shape at a meeting of the newsprint mills committee and of the board of directors of the association at meetings in Atlanta January 26-28.

Decision to proceed as rapidly as possible with the erection of the mill was made by the board of directors following the report of Clarence B. Hanson, Jr., chairman of the newsprint mills committee. The board accepted the committee's recommendations and suitable resolutions were adopted authorizing the committee to proceed with their negotiations with a group who in a meeting with the committee gave assurance that they were ready to finance the erection and operation of a mill under certain conditions, the nature of which will be made known to the membership as early as possible.

It is expected that the proposed 100,000-ton mill will represent an investment approximating $15,000,000.00. The matter of whether the mill will include a chemical plant will rest upon the decision of the engineers. One of the best proofs that the group mean business is that they have already been in consultation with engineers and are in touch with a man who has had years of experience in operating newsprint mills and who will probably be employed to handle all of the details incident to the planning, erecting and operating the mill.

Bonding Improves Textiles

(*Continued from page 46*)

of a continuous process. It is believed that they will open up many possibilities for the creation of new products, new finishes and colors. Furthermore, because of the tensile strength imparted to short-staple rovings or yarns by fiber bonding, low grade cottons, not suitable for conventional cotton manufacture, may be fabricated without difficulty. This will greatly widen the field of cotton consumption.

Two experimental laboratory machines, one for treating and the other for tensioning, were exhibited at the New York convention, and placed in operation at stated intervals, in order to provide a visual demonstration of the practices employed in the application of the fiber bonding process. Along with these machines were exhibits of the end products of fiber bonding. On display were utility braids, demonstrating the adaptability of fiber-bonded rovings and yarns to braiding. Shown were several color variations in a 5/32-inch braid of 16 ends, and sample tubes of the 1.90-1 hank roving from which the braid was made. It ran 60 yards to the pound and broke at 160 pounds. This braid is usable as clothes line, wrapping cord, venetian blind pulls, sash cord and similar items.

Three-eighths inch braided ropes were shown, made to meet federal specifications. They were made of fiber-bonded 1.90-1 roving and in comparison with rope made from conventional 8s-4 yarn, the fiber-bonded braid indicated exceptional superiority. With a minimum specification for tensile strength of 580 pounds, the conventional braid broke at 620 pounds; the fiber-bonded braid exceeded the capacity of an 800-pound tensile testing machine and the break was estimated to be at least 1,000 pounds. It was also indicated that the use of fiber bonding permitted a lower pick braiding, enabling a comparative 15 per cent increase in the yards per pound. This is of advantage because the closeness of braiding with a conventional yarn, to a great extent, determines the ultimate breaking strength and stretch characteristics.

Belt ducking of 32-ounce weight was displayed and here again a comparison of tensile strength and stretch characteristics demonstrated the superiority of fiber-bonded duck. The adaptability of the process to rovings and yarns for use in webbing looms was shown by a sample of webbing of camouflage green, woven from a warp of 3.40 hank roving, 3-ply.

A standard carpet yarn of waste cotton requires six spindles of spinning and is then beamed and four-plied on a twister spindle. The 1.50 hank roving shown in the display, before and after being fiber bonded, eliminates three processes in the production by use of the bonding process, and gives equal or better performance. Its tensile strength untreated was eight pounds; fiber-bonded, 12 pounds.

Other exhibits displayed pigment-dyed roving, dyed along with the fiber-bond treating process; direct-dyed roving; the way by which fiber bonding eliminates several operations of conventional process; fire hose; hydraulic brake hose and roving; rayon plied yarns, demonstrating 30 to 50 per cent increase in strength through fiber bonding; pigment-dyed warps for awning fabrics; pigment-dyed sewing thread; resin pigment-dyed acetate; pigment-dyed dress fabrics; "slip-proofed" marquisette; "slip-proofed" and dyed produce bagging; shoe lining fabric; florist twine; spinning tape; V-belt cord; conveyor belt fabric, and laminating fabrics.

A phase of research which is receiving considerable attention in Dan River laboratories covers multi-processing of yarns. Equipment and technique are being worked out whereby fiber-bonded properties may be given to yarns and rovings by multi-processing rather than working with single ends. This development is reported to be going forward very rapidly, and when effectuated, may open up many possibilities in the direction of more economic application of the process and its application to finer yarns and rovings.

Comparative Statement of Condition of

The Fulton National Bank of Atlanta

ATLANTA, GEORGIA

RESOURCES	December 31, 1945	December 30, 1944	December 31, 1940
Cash and Due from Banks	$ 34,733,535.07	$ 35,815,307.90	$ 15,832,282.39
United States Government Obligations, Direct and Guaranteed	74,073,301.18	46,594,913.87	5,808,535.81
State, County and Municipal Securities	2,419,137.70	2,455,039.09	3,247,820.81
Other Bonds and Securities	295,870.22	31,824.50	248,099.20
Loans and Discounts	34,564,028.46	23,095,230.22	18,085,605.14
Federal Reserve Bank Stock	90,000.00	90,000.00	69,750.00
Real Estate Owned	262,686.22	1.00	23,500.00
Bank Buildings	103,633.12	126,940.12	191,244.28
Furniture and Fixtures	125,797.83	132,535.51	151,435.37
Customers' Liability on Letters of Credit	13,065.29	37,000.00	None
Other Assets	78,930.89	47,617.98	44,490.53
Overdrafts	12,801.22	5,636.52	6,703.84
TOTAL	$146,772,787.20	$108,432,046.71	$ 43,709,467.37
LIABILITIES			
Capital Stock: Common	$ 1,500,000.00	$ 1,500,000.00	$ 1,000,000.00
Preferred	None	None	475,000.00
Surplus	1,500,000.00	1,500,000.00	1,000,000.00
Preferred Stock Retirement Fund	None	None	200,000.00
Undivided Profits	1,300,918.65	878,992.36	157,627.38
Reserves for Interest, Taxes, Etc.	635,268.70	492,736.39	314,314.70
Dividends Declared But Not Yet Payable	71,250.00	71,250.00	72,125.00
Letters of Credit Outstanding	13,065.29	37,000.00	None
Deposits	141,752,284.56	103,952,067.96	40,490,400.29
TOTAL	$146,772,787.20	$108,432,046.71	$ 43,709,467.37

Chattanooga Views Future

(*Continued from page* 45)

$99,635,178, having a value added by manufacture of $47,148,159.

Within the city of Chattanooga, 230 establishments employed an average of 17,166 wage earners, paid $14,993,110 in wages, purchased materials, supplies, fuels and electric energy at a cost of $41,372,051 and produced goods with a value of $77,569,596, having value added by manufacture of $36,197,545.

Within the Chattanooga trade area according to the last U. S. census of manufacturers, 828 manufacturing establishments employed an average of more than 65,600 wage earners, paid wages of more than $47,340,000, purchased materials, supplies, fuel and electric energy at a cost of more than $113,568,000 and produced goods with a value of more than $215,247,000, having a value added by manufacture of more than $101,679,000.

In wages paid, value of products and value added by manufacture, Tennessee ranked third among the eleven states of the South in the last U. S. census of manufacturers, and fourth in the number of establishments and wage earners.

The growth of industry in Tennessee between 1919 and 1939 as measured by percentage increase in value added by manufacture has been challenging.

Texas Plane Plant Has Big Backlog

(*Continued from page* 47)

either power unit are less than 50 mph, and cruising ranges (30 gallons of gasoline) are 600 and 700 miles, maximum.

Short take-off and landing distances, coupled with low landing approach speed of 60 mph, make the Swift a plane that doubtless will be popular with the man who wishes to fly for "the fun of it," or who would utilize his plane for commercial purposes.

With production now underway, the first Swifts came from the assembly line March 1 and the mounting orders have made it necessary for the company to seek new and larger manufacturing facilities.

Organized in 1939, the Globe Aircraft Corporation started operations in 1940, their first product being a single engine low-wing monoplane built largely of plywood and plastics and designed by a native Texan, R. S. Johnson of Weatherford. The Swift was licensed and duly approved by the Civil Aeronautics Authority.

Orders had passed the $1 million mark when the United States was attacked at Pearl Harbor. Almost overnight the company swung into war production, securing from the War Department more than $20 million in prime and sub-contracts. The company's production won high praise from the Aircraft Production Board in March 1944 when additional war plane contracts were taken on.

John Kennedy, present president of the corporation and mainspring in its organization, is a native of Scotland, coming to the United States in 1908 at the age of 17. After seven or eight years in the banking and commission business, Mr. Kennedy settled in Fort Worth where he organized the Globe Laboratories for the manufacture of animal serums and vaccines, transferring his interests to aviation in 1939 when he conceived the idea that Fort Worth was the logical place for the manufacture of aircraft—the Swift.

Reynolds Plans for Civilian Production

(*Continued from page 43*)

ratus with which the enemy was directing its gunfire. The flyers in Europe called it "chaff" while those in the South Pacific referred to it as "window."

Aluminum labels, which Reynolds has specialized in for a number of years, are being given new treatments which will make them even more desirable for manufacturers who wish to impart new beauty, eye-appeal and elegance to their products. Experienced artists and technicians are hard at work designing up-to-the-minute labels of aluminum foil which improve and enhance the appearance of any product which bears them. Methods of printing on foil, developed by Reynolds, make it possible for a manufacturer to have as many as eight colors decorating his labels. The colors take on the sparkling sheen of the foil itself, catching the eye of the customer.

Another post-war product which Reynolds is perfecting now in its boratories is aluminum yarn and oth. Aluminum foil is finished in wo forms. One is Reymet, the other Reyspun. Reymet consists of flat, narrow strips of aluminum that may be woven into many different kinds of material. Reyspun is made of strips of foil, slit to 1/50, 1/32 or 1/16 of an inch, wound around any desired core. Reyspun is usually coated with cellulose acetate to increase its pliability and flexibility. The coated threads will take dyes affecting this type of coating, making possible beautiful, blended color effects. The resulting fabrics have many uses—upholstery and drapery material, glamorous evening dresses, tablecloths and a hundred others.

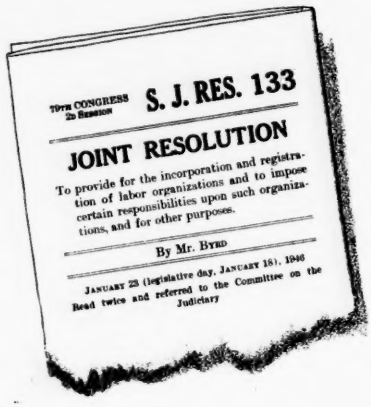
Scraps of aluminum foil from all the Reynolds foil operations are hammered into extremely fine powder which, when mixed with a suitable vehicle by paint manufacturers, produces aluminum paint. The advantages of aluminum paint are well known to the building industry. Because the paint itself is really a superfine polished metal, when it dries on the surface to which it is applied the result is a coat of metallic aluminum. Aluminum paint has a pe-

(*Continued on page 64*)

Mutual Responsibility Essential to Labor-Management Peace

(*Continued from page 42*)

drawn with every possible effort to protect the rights and justice due to all, including the general public.



79TH CONGRESS 2D SESSION **S. J. RES. 133**

JOINT RESOLUTION

To provide for the incorporation and registration of labor organizations and to impose certain responsibilities upon such organizations, and for other purposes.

By Mr. BYRD

JANUARY 23 (legislative day, JANUARY 16), 1946
Read twice and referred to the Committee on the Judiciary

The plan would require no more of labor unions than existing laws require of industrial corporations. The Securities Commission was established to see that neither the public nor the corporation stockholders were defrauded by industrial management so it would seem logical to extend the functions of the commission to include cognizance over labor unions.

One of the powers of the SEC is to require full reports and information from business corporations as to their operations, and the Resolution provides that in a reasonable time and annually thereafter, all unions shall register with the SEC; that each union shall annually report to the commission on initiation fees, annual dues, assessments levied, initiation on membership, number of paid-up members, salaries of officers, date of the last election of officers, methods of election, vote for and against each candidate for offices, reserves in the treasury, date of the last detailed financial statement furnished to all members, and the method of publication or circulation of the statement.

Mutual Responsibilities Essential

One may as well try to build a house without a foundation as to enact legislation to prevent industrial and labor strife, without first providing for mutual responsibility, and therefore the resolution provides that labor organizations having as members employees engaged in interstate commerce shall take out articles of incorporation either in the District of Columbia or in the state of their principal offices. It then provides that labor unions can sue and be sued for civil damages either for the breach of its employment contract or for the unlawful damage or destruction of property under precisely the same conditions as apply to other corporations and persons.

The resolution provides further that only those labor organizations which comply with its provisions shall be entitled to rights, privileges and benefits under the National Labor Relations Act.

Justice of Proposal

I am convinced that this legislation is democratic and just, and I shall press for it as vigorously as I can. It will not be a panacea, but I believe it will be a deterrent to strikes which are costly to all, and therefore a drag on full prosperity. With a national debt approaching 300 billion dollars, we can service such an obligation and meet our essential requirements only by maintaining national income at a constant high level. We can hope for this only through full production and employment. This will be difficult under favorable conditions, and it will be impossible under chaotic industrial conditions which can be eliminated only when all assume their fair share of responsibility.

Reynolds Plans for Civilian Production

(*Continued from page 63*)

culiar quality known as "leafing" in which the minute particles of aluminum overlap each other on the surface and within the film as well, much as the scales on a fish, providing a continuous surface that resists the effects of weather, heat and light.

A war role played by aluminum foil that will have a significant peacetime application is the wrapping of surgical instruments and machine parts in thin sheets of pure aluminum. Articles so wrapped can be shipped or stored in any climate without damage from atmospheric corrosion—one of the greatest hazards to ferrous metal parts. The aluminum foil develops a counter-electro force strong enough to protect a metal surface against both galvanic and contact corrosion.

Prior to the war the total output of aluminum in the United States was 329 million pounds—at its wartime peak it was more than two billion pounds. Within five years, Reynolds predicts, this wartime record will seem small, so many are the new uses for which this light metal is ideally suited. The Reynolds company has just leased two huge Government-owned aluminum plants in Arkansas, plants which will substantially increase Reynolds production.

The Hurricane Creek, Arkansas, plant with its capacity of 1,555,000,000 pounds a year plus the 200,000,000 pounds a year capacity of Reynolds' own plant at Listerhill, Ala., gives the company nearly half of the nation's total alumina capacity, according to Reynolds officials. The present usable annual capacity of the Jones Mill, Arkansas, reduction plant — 72,000,000 pounds of aluminum ingot—added to the joint annual capacity of Reynolds' own reduction plants at Listerhill and Longview, Wash. — 165,000,000 pounds of aluminum ingot — gives Reynolds a total annual ingot capacity roughly equal to three-fourths of the entire pre-war ingot capacity of the nation. Reynolds is now carrying out plans to substantially increase the capacity of its aluminum rolling mills in Alabama and to increase ten-fold its production of aluminum foil.

Reynolds Metals has set up a new company, Reynolds Internacional de Mexico, S. A., which has begun construction of a plant just outside Mexico City. This plant will supply Mexico and other Latin American nations with aluminum foil, aluminum sheet and powders and pastes for paints. Twenty-five young Mexicans, engineers and metal workers are being trained at Reynolds plants in Richmond, Virginia, for posts in the Mexico plant.

Houston's Prospects Good

(*Continued from page* 41)

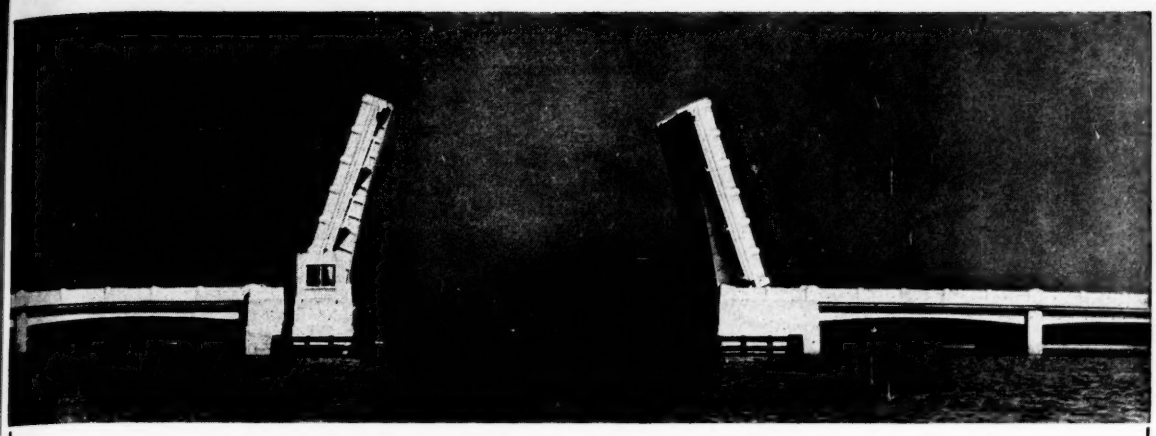
643,305 for 1955, as compared to the present estimate of 471,167.

Industrial employment is, of course, a great factor in the prosperity of any community because of the high level of average wages, and this activity is in a very healthy condition. In 1940 there were 43,176 persons employed in the manufacturing establishments in Harris County, which then numbered 668, and were principally in the City of Houston. In 1945 the comparative figures were 64,016 employees and 743 plants. A survey of the 1946 program of these same 743 plants resulted in the figure of 65,589 employees expected for the average of the year 1946. These figures disclosed that industrial employment, which markedly expanded from 1940 to 1945, will be larger in 1946 than at the peak prior to V-E Day at the beginning of 1945.

During the war all building materials were allocated on a priority system resulting in a virtual shut down of civilian construction which required new materials. However, the construction industry took advantage of salvage and substitute materials in order to continue residential construction, and in the first half of 1945 construction of such units was being carried on at approximately half the prewar peak. Planning of additional residential, business and institutional construction is now proceeding very rapidly and as new materials become more plentiful the construction trades will proceed at an accelerated rate. The number of these projects assures activity in the building trade for several years. Bond issues and engineering surveys necessary for road, bridge and sewer work in the city also have been actively pushed so that this phase of construction is ready to expand at once, and particular attention is being paid to highways and streets which will take care of increased incoming and outgoing truck and passenger car traffic. The stoppage of construction for civilian purposes has now been partially lifted and with a better supply of materials thousands of men skilled in the building trades will find jobs in and near Houston for several years, at least.

The results of a survey conducted by the Construction Committee of the Harris County Committee for Economic Development were shown in an analysis made by the Research Division of that group during the middle of October. This analysis showed that during the next three years $430,290,500 will be spent on residential, commercial, industrial and governmental construction, and on schools, churches and hospital buildings within the metropolitan area of Houston. A breakdown in the amounts to be spent on construction shows that the largest amount will be spent on building homes. New homes will cost $120,000,000; governmental construction will cost $102,500,000; industrial construction will cost $78,000,000, and commercial construction will cost $71,000,000. Churches, schools, hospitals, etc., will cost $56,790,500.

(*Continued on page* 68)



Electric Arc Welded Double Leaf Bascule Bridge

Central Avenue between St. Petersburg and Treasure Island Beach, Florida

BETTER CONSTRUCTION AT LOWER COST

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STRUCTURAL STEEL

For Buildings, Bridges and All Industrial Purposes

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Capacity: 1500 *to* 2000 *tons per month.*

STRUCTURAL STEEL *for* **BUILDINGS and BRIDGES**

Capacity 1000 Tons per Month. 3000 Tons in Stock

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The Largest Steel Fabricators in the Carolinas

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CREOSOTED

Piling, Poles, Lumber, Cross Arms, Cross Ties

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Decay and Termite Proof—Can Be Painted

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New Orleans, La.

Atlantic Creosoting Co., Inc.

Norfolk, Savannah, New York

Plants at: New Orleans; Winnfield, La.; Louisville, Miss.; Savannah, Ga.; Jackson, Tenn., and Norfolk, Va.

• Fireproof, weatherproof, water-resistant, strong, needs no painting, rustproof... all in one product? Yes, there's one building board that gives you all these features, that's equally suited for indoor or outdoor construction.

This non-critical, available-now material comes in big, 4'x8' sheets that are readily sawed or scored, drilled and nailed. Ideal for use in exterior construction as siding or sheathing. Perfect for interior use as walls, partitions, ceilings, barriers, floors, and for ducts, hoods, humidifiers where heat and moisture are hazards.

RUBEROID

STONEWALL BOARD

FOR INDUSTRIAL CONSTRUCTION AND PRODUCTION

Write for sample and Industrial Bulletin "C"

The RUBEROID Co., Baltimore 24, Md. • Mobile, Ala.

Houston's Prospects

(*Continued from page 66*)

Commercial firms in Houston maintained a high sales average each month of 1945 despite the cutting back of many war contracts and the complete termination of others. Stocks in the retail and wholesale stores are still short, but pay rolls in industry have dropped only slightly with the discontinuation of overtime allowances and the demand for goods is as great as ever. Bank clearings over the past few years show a great growth in business transactions. Comparison of years is shown here:

1940	$2,568,518,417
1941	3,206,291,388
1942	3,878,310,788
1943	4,732,935,047
1944	5,359,707,872

According to the United States Employment Service, there have been only one or two occasions since the peak of war employment when the demand for workers in Houston has not exceeded the number of applicants for jobs.

The earlier fortunes of Houston were made in the tradition of pioneer development. There was big money in lumber, trading, merchandising and in buying and selling real estate.

In the early 1900s cotton came into its own and Houston has developed as the spot cotton market of the world. In the early 1900s cotton produced in Texas increased and the warehousing and brokerage of cotton became an important part of Houston's trade. With access to ocean traffic afforded by the opening of the Ship Channel, export of cotton from Houston was added to this activity and at the same time pipe lines were laid from the many new oil fields discovered in the Houston trade territory to the city in order that cargoes of crude oil could be shipped through the Ship Channel. A natural development of this movement of crude oil into Houston was the establishment of large refining plants and to the shipment of crude oil was added the shipment of refined oil and petroleum products in bulk.

Since 1940 chemical plants producing some of the major prime chemicals have located along the

(*Continued on page 70*)

Houston's Prospects

(*Continued from page* 68)

Ship Channel and will add materially to the maritime traffic from the city. Some of these plants use as their raw material products from the oil and gas fields; others use cellulose from the timber resources of the region, and others utilize raw materials imported into Houston from abroad. Oil exploration, production and refining brought rapid and tremendous development to the area in the 1920s and 1930s and since 1940 chemical plants locating in and near Houston have given promise of new untold wealth and industrial expansion.

The shipbuilding industry developed during the war is the biggest single worry in the future of Houston. The worry does not hinge particularly on the employment of the men now working at the shipyards, but deals more directly with how the facilities existing at the shipyards can be best utilized to provide the highest possible number of jobs. Jobs for the man now in the shipyards, it is felt, will be available in other industrial plants and in commercial firms.

At present there are 13,000 men and women in the shipyards as compared to more than 45,000 at the peak period of employment in 1943. The more than 32,000 released by the shipyards have found jobs elsewhere in Houston without causing any changes in the labor market picture. It is expected that the remaining 13,000 also will be rapidly cared for by the expanding industrial and commercial firms. Much of the work which is done in building ships is done by journeymen who use the same skills in other applications; for example, the installation of piping on ships is conducted in the same manner as that in construction of office buildings and other large units so that journeymen who have been working in the shipyards can to a large extent be directly transferred to the construction industry which, as mentioned above, appears to have several years of work in immediate prospect.

The Port of Houston, which is 50 miles inland from the open waters of the Gulf of Mexico, was, prior to the war, the third major deep sea port of the nation. During the period when speed in getting supplies overseas counted more than costs the ports located on the East and West Coasts took much of the normal trade away from Houston, but now with the return of peacetime economies shipping through Port Houston is picking up at a pace that will assure this Port an opportunity to return to its former position in the list of sea ports of the nation.

Naval Stores Conservation Plan Revised

The 1946 Naval Stores Conservation Program was recently approved by the U. S. Department of Agriculture, with the requirements modified to fit anticipated funds. The program will cost an estimated $900,000.

Inaugurated in 1936 to encourage farmers to use practices which will conserve the timber resources of the Deep South, these programs are administered by the Forest Service of the Department of Agriculture.

Targets For South

(*Continued from page 37*)

ently provided more than 25 per cent of the jobs, whereas the trade and service occupations of 1940 accounted for more than 50 per cent of all non-government employment. In other words, for each person engaged in producing some new agricultural or manufactured commodity, we can count on putting two more people to work in distributing and servicing it.

"Much of the South's development, in units and collectively, depends on capital investment. Time was when New York was looked upon as the money center of the nation. Particularly was this true of us here in the South. Still struggling back from the ravages of war and the period of reconstruction, dominantly agricultural and even then largely dependent on the whims and vagaries of the cotton market, we had relatively little money. A consolidated statement of 1895, with 91 New York banks reporting, showed total deposits of $552,847,800. Today, four Atlanta banks alone, out of the entire banking group of Georgia, show total resources of $1,020,289,380 — or $467,441,580 more than the 91 New York banks of 50 years ago. Back 50 years ago, it was natural for men who sought bank credit in large amounts to finance industrial plants in the South to look to New York for accommodations. Today the picture is entirely changed.

"The South stands on the threshold of the greatest industrial expansion in its history. Developments will require money — much money—not only as capital investment, but in later stages for operating needs. It is plain to see that both kinds of money are available right here at home. We, who have watched the South grow, who know the latent mineral and vegetable wealth, the labor and climatic conditions with which our area is endowed, have great faith in its future. The men and women whom we call our depositors, the people who own these hundreds of millions of dollars which we now hold, will in many instances become the capital investors in the new program of the growing South. Deposits and resources of this area will be adequate to meet any loan requirement, even of the largest industrial unit. This represents a new type of independence for the South.

"Summed up, we have tremendous resources. If we bind these together, climate, labor, capital and the others, with vision, planning and courage, who can say how much of a contribution we can make to that which the whole nation is seeking—progress and prosperity?"

Louisville Reconverts

(*Continued from page 36*)

ing about 500 people. We are now in the process of spending $1,500,000 on complete modernization of our machinery, machine tools and enlargement of several of our buildings. Our present plans call for an increase of 250 employes and by this time next year we expect to be employing 1,000. We now have approximately 120 dealers with 200 additional dealer applicants in the South. We are invading the Midwest market through the steadily increasing number of Montgomery Ward farm stores. Our estimated volume for 1946 is $7,000,000."

Gunnison Homes, a U. S. Steel subsidiary, takes pride in its housing efforts during the war. It furnished prefabricated homes for Oak Ridge, the Tennessee atomic bomb plant, as well as for hospitals, barracks, and so on, at home and overseas. Now, of course, the same products, with peacetime refinements and developments, are going into the task of relieving America's serious housing shortage.

Foster Gunnison, president, says that Gunnison Homes "now looks forward to early resumption of mass production of homes on an even greater scale than its prewar experience." He adds that as an evidence of his firm's confidence in the future it plans to start immediately on a $1,000,000 plant here, to be the first completely mechanized project in the United States for production of prefabricated homes.

American Air Filter Company, headed by William M. Reed, made ship sections and deck structures for LST's and DE's, tank ventilation units, airplane carburetor filters and balks for floating bridges. Now it is putting its stress on its newly-developed electronic air filter for industrial plants, office buildings and homes.

"Reconverting for good business ahead is no problem for American Air Filter," points out Mr. Reed. "We manufactured approximately $25,000,000 of war material, but we were fortunate in being able to produce during the war all of our standard lines of air filters and dust-collecting equipment, which went into virtually every war plant in the country.

"During the war our production totaled about eight times the pre-war volume, and after cancellation of war contracts we are still operating at about three times the pre-war level. In the not too distant future we hope our total employment will exceed our highest pre-war level."

Reynolds Metals Company, which bulked large on Louisville's war-industry front, making aluminum sheets for planes, powder for incendiary bombs, bar and rod stock for aircraft, litters, foil for anti-radar, aircraft parts galore and numerous other items, already has gone headlong into peacetime production. Pots and pans, aluminum furniture, shipping crates, golf-club heads, kitchen units, deep-freezers. Nine plants are operating in the Louisville area alone.

Girdler Corporation and Tube Turns, affiliates, contributed enormously to the war stockpile. There were piping systems for navy craft and defense plants, Girbotol units—used for purification of gasoline plant residue—and Thermex units, making heat for fabrication of plastics and other products, to mention just a few. Now all these items, and many more, are going into peacetime production with John Q. Public as No. 1 customer.

A few other products that Louisville makes are flour and feeds, staple food products, cigarettes, cigars, chewing and smoking tobaccos, Bourbon bottled-in-bond and blended liquors, synthetic resin, plastics, latex, baseball bats and golf clubs, toys, plywood panels and wallboards, conveyors, bedding, screens and fencing, oil refinery equipment, plumbing fixtures, bath tubs, ice making machinery, flooring, veneer, synthetic rubber, and rubber products.

Hardly a plant in the Louisville area is missing from a list of those with big expansion plans. Current woes are new machines, materials and parts, building supplies, sales and distribution problems and transit. Labor supply is adequate for immediate requirements, generally. It is expected that later demands can and will be met.

Representative Appointed

Sutton Tool Co., of Sturgis, Mich., has announced the appointment of Collier Co., 8015 Carnegie Ave., Cleveland 3, Ohio, as its sales and engineering representative in northern Ohio. The Collier Co., represents several machinery and tool manufacturers. George A. Collier, president of the firm, was formerly sales manager of Cleveland Automatic Machine Co., and at one time, secretary-treasurer of the Purchasing Agents Association of Cleveland.